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ABSTRACT

A framework is provided for considering whether current New York community college planning and control systems can be made more effective and efficient through the use of business-derived strategic planning and management control technology. After a report summary and section 1's introductory material, section 2 reviews current pressures on New York community colleges for improved management and specifies the objectives of an effective strategic planning and management control system in a community college setting. Section 3 presents a conceptual framework for strategic planning as a total system, reviews the state-of-the-art in strategic planning and management control technology in profit-making business organizations, non-profit-making and non-business organizations, higher education, and community college sectors; and considers the value of business-derived technology transfer in non-business sectors. Section 4 reviews laws and regulations governing the use of strategic planning and management control in the New York community college system. Section 5 analyzes the differences between the state-of-the-art and current practice in these areas in New York colleges, and section 6 proposes a set of alternatives for decisionmakers to improve strategic planning and management control based on the analysis. In section 7, conclusions and tentative recommendations for reform are presented. Section 8 contains appendices designed to clarify the concepts used, including a glossary, references, and a bibliography. (HB)

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COMMUNITY COLLEGE STRATEGIC PLANNING & MANAGEMENT CONTROL REFORM

IN NEW YORK STATE - AN ISSUE PAPER

by

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S U M M A R Y

(1) This is a 2-volume issue paper on community college strategic planning and management control reform in New York State. As an issue paper it establishes a framework for considering the basic question whether current New York community college planning and control systems can be improved by use of business-derived strategic planning (to determine basic objectives and fiscal resource use policy) and management control (to achieve such objectives by using resources efficiently and effectively) technology. It outlines: (2) The pressure for improved strategic planning and management control systems in New York's community colleges; (3) Strategic planning and management control current state-of-the-art; (4) New York community college current strategic planning and management control law and practice; (5) Variances between current strategic planning and management control state-of-the-art and New York community college practice; (6) Strategic planning and management control future alternatives for New York's community colleges; and formulates (7) Conclusions and recommendations. This issue paper also contains the following appendices: (I) A Glossary of Technical Terms used in the paper (pp.G(1)ff.); (II) Reference Notes (pp.N(1)-N(2)ff.); and (III) A resource Bibliography by sector (pp.B(1)ff.).

(For the detailed structure of this issue paper see the Tables of Contents following this Summary)

(2) Pressure for improved strategic planning and management control systems in New York's community colleges arises from rapid socio-economic and technological change in the State enlarging institutional competition for students and causing costs to increase with consequent public demand for greater efficiency, effectiveness and accountability of New York's system of public higher education including its community colleges. (For details see Pages 3&4 following)

(3) The current state-of-the-art in strategic planning and management control technology in the profit-making business, non-profit-making and non-business, higher education and community college sectors is analyzed. The conceptual framework for analyzing planning and control systems developed in the mid-1960's by Professor Robert N. Anthony of Harvard is employed in this process. This conceptual framework specifies the development of long-term objectives and basic resource use policies in strategic planning and their implementation in the management control subprocesses of programming, budgeting, operating & accounting and reporting & analysis in a successive closed-loop cycle. Programming provides the

crucial linkage between strategic planning and management control.

Actual practices in business organizations such as General Electric and New York Telephone illustrate an advanced state-of-the-art and use of this planning and control technology in achieving the broad purposes of an organization. The spillover of this business-derived technology into the non-profit-making and non-business sector can be seen in the Hawaii State Plan where governmental policy-making is the major concern. Spillover of this strategic planning technology into higher education systems and institutions is also taking place. The University of Maryland and Carnegie-Mellon University strategic plans and the State University of New York (SUNY) "Meshing Planning with Budgeting" provide some examples. However, on the other hand, there appears to be little spillover yet of business-derived management control technology into the higher education and community college sectors in spite of the efforts of the National Association of College and University Business Officers (NACUBO) and such pioneering as Michigan's Manual for Uniform Financial Reporting of Michigan Public Community Colleges. (For details see Pages 5-41 following)

(4) New York community college current strategic planning and management control law and practice is a product of the unique organization of New York's community college system. The 30 locally sponsored upstate community colleges are under SUNY general jurisdiction and the 7 in New York City are an integral part of the City University of New York (CUNY). Both SUNY and CUNY are under the general policy direction of the New York State Board of Regents and part of The University of the State of New York.

New York law specifies similar community college objectives for both the SUNY and CUNY systems. There is no New York law requiring strategic or master planning by the State's community colleges as a total system or individually. Furthermore, there is no such law dealing with overall management control of the State's community college system. Such law as there is deals only with the community college budgeting and accounting & reporting management control subprocesses.

The form and content of New York community college operating budgets is determined by SUNY and approved by the Governor's Budget Director. The elected State Comptroller prescribes a uniform system of accounts and financial reports for New York's community colleges that does not conform with generally accepted accounting principles (GAAP). In actual practice the Comptroller's accounting requirements are largely ignored by the individual institutions. Furthermore, independent audits of community college financial statements are not required by law to conform with national standard generally accepted auditing standards. As a result, forecasting substitutes for programming in New York's community colleges and budgeting focuses on state aid requirements rather than system and institutional management control. Differing New York State, City, upstate local sponsor and SUNY community college fiscal years further complicates New York's community college planning and control practices. (For details see Pages 42-64 following)

(5) An analysis of variances between the strategic planning and management control state-of-the-art and current New York community college practice bring out the many weaknesses in the State's

systems and local institutions. The lack of specificity of New York community college strategic planning, the weak state of management control at both State and local institutional levels in spite of the large amount of state aid provided, and the present lack of programming needed to link strategic planning and management control, result in an inability to utilize New York's community college resources efficiently and effectively. (For details see Pages 65-72 following)

(6) Future policy alternatives for New York's community colleges are set forth as possible answers to the question whether the perceived differences between state-of-the-art strategic planning and management control and New York current practice should be reduced or eliminated entirely. Cumulative alternative resolutions of these differences for the consideration of New York community college policy-makers follow:

Alternative No. 1 continues without change current New York community college strategic planning and management control law and practice. The advantage of maintaining the status quo is the avoidance of disruption that usually accompanies innovative change. The disadvantage is that it lets matters drift in spite of a recognized need for constructive improvement.

Alternative No. 2 would strengthen strategic planning and improve management control practices in New York's community colleges by: (1) Developing total system goals based on a systematic review by SUNY and CUNY of affecting external influences and the strengths and weaknesses of their community colleges; (2) Including such community college total system goals in SUNY and CUNY master plans; (3) Developing individual community college strategic plans within such total system guidelines; (4) Establishing community college 5-year plan/budgets based on these strategic plans; (5) Revising community college accounting systems to conform with the Comptroller's uniform system of accounts; and (6) Restructuring community college annual financial reports to conform with their revised accounting systems. The major advantage would be improved direction and control of the total system of community colleges in New York State. The major disadvantage might be that such changes could be viewed as threatening local community college autonomy.

Alternative No. 3 would strengthen management control and financial reporting in New York's community college system by revising the Comptroller's uniform system of accounts for community colleges to conform with generally accepted accounting principles (GAAP) and requiring annual independent certified public accountant (CPA) financial and compliance audits of institutional financial statements in conformance with generally accepted auditing standards. The major advantage would be the creation of an accurate, comparable and verifiable financial fact base for college management control systems. The major disadvantage is the considerable cost and disruption of such changes.

Alternative No. 4 would strengthen New York community college management control programming, budgeting and performance analysis by: (1) Establishing institutional program budgeting linked to strategic plans; (2) Comparing the results of actual and budgeted institutional operations; and (3) Creating SUNY and CUNY central community college data bases to monitor more effectively the financing and operations

of their individual institutions. The major advantage would be the establishment of a sound system-wide basis for improving community college strategic planning and management control. The major disadvantage would be possible erosion of local autonomy with more centralized financial control by SUNY of its community colleges and domination of the educational process by college business officers.

Alternative No. 5 would further strengthen local and statewide strategic planning and management control of New York's community colleges by reorganizing the existing split SUNY/CUNY system into a state-of-the-art balanced centralized/decentralized system under a single State-level entity with autonomous local boards presiding over county or regional districts as in California, Illinois, Texas, Florida and Michigan. The major advantage of this reorganization would be the elimination of the current dilution of responsibility, authority and accountability for New York's total community college system. A major disadvantage would be the political difficulty of accomplishing such a drastic change in New York's unique system of community colleges. (For details see Pages 73-85 following)

(7) The conclusion on the central issue of this paper, whether current New York community college planning and control systems could be improved by use of business-derived strategic planning and management control technology, is an unequivocal "YES"! The best available management tools must be used to improve New York community college efficiency and effectiveness in this era of fiscal crisis!

It is therefore recommended that Alternative No. 1, preserving the status quo, be rejected as entirely inadequate and that Alternative No. 5, proposing an extensive reorganization of New York's community college system, be delayed indefinitely as politically difficult to achieve. It is further recommended that serious consideration be given to improving New York community college strategic planning and management control along the lines proposed in Alternatives Nos. 2-4 above. Detailed analysis of the implementation problems likely to occur in such change should precede any action on this recommendation. Upon accomplishment of Alternatives Nos. 2-4 it is further recommended that an issue paper be developed testing the reorganization proposals of Alternative No. 5 above. General acceptance of the findings of this issue paper should precede any major reorganization of New York's community college system such as that proposed in Alternative No. 5. (For details see Pages 86-93 following)

March 1, 1982

COMMUNITY COLLEGE STRATEGIC PLANNING & MANAGEMENT CONTROL REFORM
IN NEW YORK STATE - AN ISSUE PAPER

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1. INTRODUCTION:

This is a 2-volume issue paper on community college strategic planning and management control reform in New York State. As such it is a preliminary study setting forth a framework for further research and consideration of the issues raised.

The central issue of this paper is whether planning and control in New York's community college system and component institutions can be made more fully effective and efficient through the application of business-derived theories, concepts and practices of strategic planning and management control (as these terms are defined in the Glossary of Technical Terms in Appendix I following). An examination of this question begins in Section 2 of this paper with a review of the current pressures on New York community colleges for improved management. The over-all objectives of an effective strategic planning and management control system in a community college setting are also specified.

The current state-of-the-art of strategic planning and management control is next examined from a number of viewpoints in Section 3 of this issue paper. First, a conceptual framework of strategic planning and management control processes in organizations as a total system is outlined. Then strategic planning and management control current state-of-the-art is reviewed in the profit-making business organization, non-profit-making and non-business organization,

higher education and community college sectors. In each sector current concepts & standards and linkages between strategic planning & management control are examined. Then current best practices in each sector are depicted with actual case examples. Finally the value of such business-derived technology transfers to the non-business sector including higher education is considered. Some of the questions covered are: (1) Is the transfer of this business-derived technology desirable?; (2) Is it feasible?; (3) Is such technology transfer in fact now occurring?; and (4) How useful could such technologies be in the community college sector?

This paper in Section 4 then reviews the current use of strategic planning and management control technology in New York's community college systems and component institutions. The differences or variances between the state-of-the-art and current practice of strategic planning and management control in New York's community colleges is then analyzed in Section 5. Based on this analysis a set of alternatives moving in the direction of more effective strategic planning and management control in New York's community colleges is proposed for decision-makers in Section 6. Finally the paper presents the author's own conclusions and tentative recommendations for reform in Section 7.

Section 8 of this issue paper contains a number of appendices designed to clarify the concepts introduced. Appendix I (pp.G(1)ff.) contains a glossary defining the many special technical terms used in this paper. Appendix II (pp.N(1)-(3)ff.) contains reference notes cited in this paper in numerical order. Appendix III (pp.B(1)ff.

contains an extensive bibliography by sector for further reference on subjects introduced in this paper.

From time to time reference is made in this paper to Dutchess Community College in Poughkeepsie, New York. Such is not done to illustrate effective or ineffective practices but rather to provide a community college focus using an institution familiar to the author. Although the Board of Trustees of Dutchess Community College granted the author a sabbatical leave in order to produce this issue paper, it should not be inferred that they are in agreement with any or all of the contents of this paper.

2. PRESSURE FOR IMPROVED STRATEGIC PLANNING AND MANAGEMENT CONTROL SYSTEMS IN NEW YORK'S COMMUNITY COLLEGES:

Pressure for improved operation of the higher education sector including New York's community colleges is coming from many sources. Such pressure arises from changing socio-economic and cultural conditions and from rapid technological change. (1) One of the most important of these is the growing competition among colleges for student in the traditional 18 to 25 year old age group. A national decline of 25% in secondary school enrollments through the 1980's is expected to sharpen this competition. New York State will share in this enrollment decline. (2) Furthermore the increasing college enrollment of adults may not completely fill this gap. (3) In addition, the spiraling costs of equipment, supplies and energy in a time of inflation are creating additional pressures upon all institutions

of higher education.

Closely related to the pressure of rising higher education costs is a growing public demand for increased efficiency, effectiveness and improved accountability of the Nation's colleges and universities, particularly the public ones such as New York's community colleges. Public demands for lower taxes and tighter fiscal controls have greatly increased since the passage of California's Proposition 13. This has led to pressure upon public colleges to establish budget priorities for resource allocation purposes and to requirements for more detailed reporting of revenues received and expended. As a result public colleges are now beginning to realize that past funding support may not be available in the future if satisfactory stewardship is not maintained.

New York's public community colleges historically have had the unique double mission of serving the needs of their students for technical and other training and of furthering the economic development of their locality and the State. Public pressure is now increasing on New York's community colleges to contribute even more fully to the State's economic development. (4)

To respond adequately to these pressures the overall goal of New York's community college strategic planning and management control system should be to provide the people of the State with such needed educational programs and services at maximum efficiency and effectiveness. Having postulated this overall goal of New York's community college system a thorough examination of the strategic planning and management control processes is next in order.

3. STRATEGIC PLANNING AND MANAGEMENT CONTROL STATE-OF-THE-ART:

3.1 A Conceptual Framework of Strategic Planning and Management Control Processes in Organizations:

In 1965 Professor Robert N. Anthony of Harvard analyzed the general characteristics of management planning and control systems in organizations.(5) He determined that such systems contained the following three internally oriented processes: (1) Strategic planning; (2) Management control; and (3) Operational control and the externally oriented process of financial accounting (and reporting). A management information system joins together and serves all four of these processes.

This planning and control conceptual framework is universal in scope being applicable to both business and non-business organizations including colleges and universities. It has been accepted as a useful analytical framework by most credible organization and management analysts. Although authorities such as Steiner, Andrews and Ansoff may use differing terminology their basic conceptual framework varies little from that set forth by Anthony.(6) A common terminology in the area of management planning and control primarily following that of Anthony's is emerging. This paper uses Anthony's conceptual framework and terminology primarily because of its integrated and total system approach to management planning and control problems and focuses upon its strategic planning and management control aspects. The definitions of the terms "strategic planning" and "management control" as used in this paper follow:

Strategic planning is the planning and control subprocess of deciding on the objectives of the organization, on changes in these objectives, on the resources used to attain these objectives, and on the policies that are to govern the acquisition, use, and disposition of these resources. (7)

The above definition of the strategic planning process assumes a formal specification of the organization's overall goals in writing by its top policy decision-makers. Existing and perhaps implicit goals and policies should be taken into consideration during this process. These overall goals set the framework within which more explicit objectives at lower levels can be developed. A hierarchy of goals and objectives of the organization and its component units is thus created. (8) These goals and objectives should be consistent with each other and influenced by present and anticipated environmental conditions including legal constraints, and the strengths and weaknesses of the organization.

Management control is the planning and control subprocess by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives. (9)

This definition of the management control process should not be misconstrued. The term "management control" refers to the process by which management seeks to accomplish the goals and objectives of the organization as formulated in the strategic planning process. The inclusion of the term "control" in this context does not imply the need of rigid conformance of operations with plan or necessarily require changes in existing structural relationships. Instead the management control process is a method of ensuring that the whole organization moves forward together in the direction of predetermined goals.

Together these interacting strategic planning and management control processes become what Steiner calls a "way of life". They

cause an organization to focus systematically on its purposes so that "things just don't happen". By thoughtful development and implementation of realistic strategic goals an organization survives in today's unpredictable socio-economic climate.

A more detailed examination of the strategic planning and management control processes and their linkages as understood and practiced by the business sector follows. The transfer of such technology to the non-profit and non-business sector and to higher education and community colleges is then examined.

3.2 Strategic Planning and Management Control State-of-the-Art in Profit-Making Business Organizations:

3.2.1 Concepts and Standards:

3.2.1.1 Strategic Planning Process:

The strategic planning process as defined above contains the following five subprocesses: (1) Preliminary determination of the broad purposes of the organization; (2) Assessment of organizational internal strengths and weaknesses; (3) Search of the external environment for opportunities, threats and constraints; (4) Determination of the organization's responsibilities to society; and (5) Clarification and written specification of the overall goals and policies of the organization. (10)

The preliminary determination of the broad purposes of the organization serves as a base point from which to begin the strategic planning process. Such broad purposes are subject to modification as the other steps in the process take place.

The assessment of organizational strengths and weaknesses includes

a thorough analysis of internal resources. Physical resources including the level of use of all organization assets are analyzed. Human resources (personnel) are also evaluated. The internal strengths and weaknesses are then determined and specified in writing.

A search of the external environment of the organization for new opportunities for service is then made. Relevant technological, socio-cultural and demographic changes are reviewed. Legal constraints are examined. Threats from competitors are assessed. Influences beyond the organization's control are identified. Such a combined assessment of internal resources and the external environment is commonly referred to as a "WOTS-up analysis" ("WOTS" meaning "Weaknesses, Opportunities, Threats and Strengths").

The determination of the organization's responsibilities to society involves a consideration of the values and special objectives of influential groups and individuals within the organization's sphere of influence. The desires of the organization's top executives should also be considered.

The clarification and written specification of the overall goals and policies of an organization resulting from the above process set long-term objectives that once embarked upon are largely irreversible. Goals and policies formulated by this strategic planning process establish the basic guidelines of management control.

3.2.1.2 Management Control Process:

As defined above, management control is the process by which management seeks to accomplish its overall goals and objectives by acquiring needed resources and utilizing them effectively and efficiently. Management control is a top management function and should not be confused with lower level operational control which assures that specific tasks are carried out efficiently and effectively. In the management control process heavy reliance is placed on internal reports, management accounting and other records.

The four successive cycles of the management control process make it circular in nature. These successive cycles are:

(1) Programming; (2) Budgeting; (3) Operating & accounting; and (4) Reporting & analysis defined as follows:

Programming is the management control subprocess of deciding on the nature and size of the several programs that are to be undertaken in order to achieve the organization's objectives. (11)

Programming therefore is a planning function and the coupler between strategic planning and management control. In the programming process programs are established to achieve the goals and objectives determined in the strategic planning process. Such programs are combinations of an organization's resources (inputs) and activities producing outputs designed to achieve predetermined goals and objectives. Such programs may cross both established organizational lines and existing responsibility centers. The programming cycle usually encompasses a number of years in the future and sets the long-term framework for short-term budgeting

by a process of convergence.

Budgeting is the management control subprocess of deciding on the actual operating plan for the coming year with that year's program converted into financial terms corresponding with the spheres of responsibility of those charged with executing the budget.

The budget is both a planning and control device. A budget once created and authorized becomes a control device to ensure that responsibility center managers work toward achieving the organization's goals and objectives rather than their own personal and possibly dysfunctional ones.

Operating & accounting is the management control subprocess during the period of actual operations in which records are kept of resources actually consumed (inputs) and outputs actually achieved by both program and responsibility center.

In the operating & accounting process records of resources used and of results (outputs) achieved are maintained on common dollar terms by the accounting system. These records in business organizations are kept by program (product line) and by responsibility center (organizational unit). Useful internal management reports and reliable external financial reports can then be compiled as needed.

Reporting & analysis is the management control subprocess after the period of operations in which management reports comparing budgeted outputs and inputs with actual outputs and inputs are prepared and analyzed to determine situations requiring corrective action in the next management control cycle.

This analysis of variance between actual and budget should concentrate upon the exceptional variation to facilitate "management by exception". The success of an organization in accomplishing its goals is also determined by this reporting &

analysis process. Further goal achievement is encouraged and motivation rekindled by this cycle which is then ready to be repeated as the management control loop is closed.

3.2.1.3 Linkages between the Strategic Planning and Management Control Processes:

The programming segment of management control is a continuous and converging long-term planning process closely linked to the strategic plan. Programs should produce outputs designed to achieve goals and objectives developed in the strategic planning process. Activities not designed to accomplish such goals and objectives cannot be considered valid programs as defined above. The programming process therefore constitutes the crucial linkage between the goals created in strategic planning and their implementation in the management control process.

The strategic planning and management control processes as linked by the programming cycle are a powerful tool for maximizing the use of resources to achieve organizational goals efficiently and effectively. They constitute the essence of top management. Yet conceptual procedure by itself does not necessarily guarantee success. Good judgement and mutually reinforcing cooperative efforts are still important factors in successfully managing an organization.

3.2.2 Practices in Selected Business Organizations:

Few business organizations have fully implemented a system of strategic planning and management control. Fifteen years is a relatively short time within which to expect widespread use of these

concepts. Many organizations do strategic planning informally operating intuitively and do not recognize the process as such. However all well-operated businesses recognize the need for the management control process. The New York Telephone Company, Boise-Cascade Corporation, General Electric Company, IBM Corporation and Control Data Corporation provide some examples of effective practice in the areas of strategic planning and management control as outlined below.

The New York Telephone schematic overview highlights the results of formal and integrated strategic planning undertaken by this company.

The diagrams in this schematic overview specify the Company's goals and objectives for the next 5 years. They list the major issues related to internal conditions and a perceived turbulent external environment. A careful review of the schematic diagrams show that the organization has moved its financial planning from forecast-based to strategic management as a more assured method of creating the Company's future.

A case study of strategic planning and management control in the Boise-Cascade Corporation illustrates in considerable detail how a major diversified company clarified its overall goals after suffering severe losses in acquisitions. Six major strategies were identified for further amplification by the Company's divisions. By means of a planning year calendar, divisional plans, updating the projected 5-year operating budget, the allocation of capital resources and the institution of performance review the Company moved ahead with new purpose so that past financial losses

were reversed. (12)

The General Electric Company provides an outstanding example of a strategic planning and management control system tailor-made for a highly diversified company with a decentralized organizational structure. Forty-three strategic business units (SBU's) or major programs were identified in the Company's planning process. Use of these SBU's avoided the complicated "cross-walking" required to identify an adequate program structure. The strategic planning process at General Electric utilizes a step-by-step procedure starting with specification of the mission of each SBU and ending with contingency plans when assumptions are on weak grounds. Strategies for specific SBU's emerge from an analysis of their mission and the external environment. The competition is carefully analyzed. Only after this strategic analysis has been accomplished are resources allocated to SBU's. A screening device is also used to rank SBU's by level of business strength and industry attractiveness resulting in a need to invest, expand or to harvest them. This device helps to determine priorities and thus insure that resources are allocated in the best interests of the Company as a whole. (13)

The IBM Corporation is an example of a highly centralized/decentralized strategic planning and management control system. Planning at IBM consists of program (product line or function) and period planning to achieve approved targets within fixed time frames. Strategic planning covers a five year time frame. Management control is exerted through the two-year operating plans

focusing on implementation and budgets. This planning and control system reflects the historical development of IBM and its management style and philosophy. Although IBM does not publish its strategic goals they can be deduced from actions of the Company's top management. (14)

The Control Data Corporation illustrates a "top down" approach to strategic planning and management control. Howard Jensen, Control Data's vice-president of financial analysis and planning, sees this approach as a pragmatic process of arriving at a consensus on the goals for the future and how they should be achieved. Simple projections and complex models are used in this process. Trade-offs are made on the basis of cost-benefit analyses. Various alternatives are examined along with the possible risks involved in following them. A strategic review committee examines the tentative plan. Only after the plan has been approved by the Board of Directors does the Company's budgeting process begin.

3.2.3 The Value of Strategic Planning and Management Control in a Business Setting:

The above examples of strategic planning and management control indicate the understanding and use of the processes in profit-making business organizations. Strategic planning and management control technology is recognized by many business organizations as a management tool and a superior alternative to ad hoc intuitive judgement. It is accepted in the business world that effective use of this technology can prevent the misuse of resources and can create

new grounds for cooperation and commitment leading to effective accomplishment of organizational purpose. Although success is not guaranteed by using this technology it does lead to minimizing risk and error. Strategic planning and management control is now being recognized as a rational method of assuring survival of an organization by creating a successful future for itself.(15)

Whether this strategic planning and management control technology can be transferred to non-business and non-profit organizations such as community colleges is next considered.

3.3 Strategic Planning and Management Control State-of-the-Art in Non-Profit-Making and Non-Business Organizations:

3.3.1 The Need for Technology Transfer of Business-Derived Concepts, Standards and Practices to the Non-Profit Area:

The non-profit-making and non-business sector of the economy includes such entities as the Federal, state and local governments; hospitals, health and welfare organizations; mutual insurance companies; mutual banks and trusts; civic organizations; and colleges and universities. A series of case studies by the U.S. Advisory Commission on Intergovernmental Relations in 1977 showed that the growth of the Federal Government in recent years was "accidental" and "like Topsy".(16) An apparent lack of any decision-making compounded problems in many of the more unmanageable Federal agencies. Thomas Naylor pointed out in 1979 that valuable strategic planning lessons could be learned from the corporate world by the Federal Government.(17) A little more than a year later Wassily Leontief wrote that "the U.S. needed to tool up immediately for the effective implementation of

strategic planning in case President Reagan's policies failed to improve the economy".(18)

There are very real differences between business and non-business organizations, the principal one being that the latter do not have a profit-making goal. These differences are examined in greater detail in Sections 3.3.2.1 & 3.3.3.2 following. The real question here though is whether these differences impede application of business-derived strategic planning and management control concepts in the non-profit sector and, if so, whether such technology can be adapted to fit this fluid and diffuse area. Bower and Christenson answer this question in the affirmative. They point out that these concepts of strategic planning and management control evolved from the work of Chester Barnard which covered both private and public organizations.(19) This same question was considered in 1980 at the White House Conference on Strategic Planning with the conclusion that such technology transfer was possible and that without strategic planning and a frame of reference for understanding problems valid and realistic decisions could not be made. It was necessary to think systematically about the consequences that could result from hard to define issues if governmental agencies were to be effective. This conclusion differs from Moskow's. Moskow looked to business for one definitive model and not for a set of concepts that could be applied to all governmental entities.(20)

3.3.2 Concepts and Standards:

3.3.2.1 Strategic Planning Process:

Strategic planning already takes place in some form or other in

the non-profit-making non-business sector. The terminology used to describe the strategic planning process here varies, with "policy-making" or "policy development" being the equivalent terms frequently employed. Many public purposes are vaguely expressed initially in constitutions, statutes, regulations and other goal statements.

These purposes are then often reinterpreted by external groups and agencies through a process of compromise and political trade-offs. The resulting policies are often poorly understood by agency personnel charged with implementing them. As a result such ill-defined goals and common purposes cannot be pursued in a fully cooperative fashion. Where there is a multitude of goals, the situation is even worse.

Lawrence Lynn recommends that "policy analysis" be undertaken as a means of clarifying and publicizing the appropriate goals of a non-business organization. (21) This would be a kind of detailed WOTS-up analysis as defined above in Section 3.2.1.1 of this paper.

3.3.2.2 Management Control Process:

Non-profit-making and non-business organizations generally have weak or non-existent management control systems of the type defined in Section 3.2.1.2 of this paper. The programming concept in particular is not widely understood or used in the non-profit area in spite of recent efforts to introduce planning-programming-budgeting systems (PPBS), management by objectives and zero-based budgeting. These efforts have not been successful in most non-profit organizations because of an inability to secure a consensus on future goals or the means to achieve them

and a lack of understanding or willingness to use state-of-the-art technology. It is only after the programming process is completed that multi-year financial plans can be developed and program costs and outputs identified. As a result most non-business sector budgets continue to be line-budgets by object of expenditure.

The widespread use of fund accounting in the non-profit sector aggravates these goal-seeking and programming difficulties. Fund accounting prevents top management and others from getting an over-all perspective of the organization and its performance. The National Council of Governmental Accounting establishes accounting standards in the form of generally accepted accounting principles (GAAP) for state and local governments and requires fund accounting.(22) The American Institute of Certified Public Accountant (AICPA) in conjunction with non-profit industry financial associations creates standards for non-governmental agencies and also currently specifies the use of fund accounting.(23) There are many inconsistencies between the accounting principles prescribed by the various AICPA non-profit industry guides which, for the most part, do not prescribe Financial Accounting Standards Board (FASB) business accounting standards. Even so, some non-business organizations are now preparing financial reports which include business-derived methods of handling depreciation and inventories. New report formats are also being used that consolidate fund reports into one over-all financial statement for the organization. These help to provide an overall picture of the organization's activities. With greater pressure for public accountability the distinction between internal and external

financial reporting is disappearing in public non-profit entities.(24)

The Financial Accounting Standards Board (FASB) which sets business accounting standards is now turning its attention to the non-business sector to determine how far business accounting and financial reporting principles can be made applicable there.(25) As a result business and non-business accounting and financial reporting principles are starting to coalesce into a single unified whole.

Financial reports can be of help in assessing stewardship and goal accomplishment but measuring performance is generally not easy in the non-business sector where goals are often unclear and the services provided lack precise measurement.(26) Surrogate or substitute output measures can, if necessary, replace the presently unmeasurable direct ones. As accounting methods and performance measurement practice improve and as comparisons are made between budgeted and actual costs the stage is being prepared for expanded business-type management control systems in the non-profit-making and non-business sectors.

3.3.2.3 Linkages between the Strategic Planning and Management Control Processes:

The lack of clearly specified goals in most non-profit and non-business organizations has been noted above. Their absence prevents use of an effective programming process based on such goals. As a result no effective linkages between the strategic planning and management control functions can usually be found in such organizations.

3.3.3 Practices in Selected Non-Business Organizations:

Good examples of strategic planning and management control practices are not easy to find in the non-profit-making and non-business sector. The State of Hawaii, United Way, Kaiser-Permanente Medical Care Program and the U.S. Department of Health, Education and Welfare provide some of the best examples of goal-oriented strategic planning and management control in this sector.

The State of Hawaii State Plan is an example of such strategic planning and management control practice in the governmental area. The Hawaii State Plan Act of 1978 is the Nation's first comprehensive strategic plan enacted by a state legislature. The Act specifies State goals, related objectives and policies covering major program activities. Provision is also made for coordinating all major state and county activities to implement the plan. The Act establishes a Policy Council and prescribes budgeting, appropriating and allocating funds by major program as implementation mechanisms.

Another example of strategic planning can be seen in part in the work of the United Way. The United Way of America Services Identification System (UWASIS) II is a taxonomy or classification of social goals and human service programs. It sorts and interlaces various facets of one broad human goal of a "happy and satisfying life for each human being" into eight objectives, their supportive service functions, programs and outputs. The

result is a statement of strategic goals, objectives, programs and products that can facilitate the task of local United Way agencies in allocating funds to clearly identifiable programs with known purposes and results.

Kaiser-Permanente Medical Care Program provides an extraordinary illustration of how a basic strategy emerged from a mixture of functional policies. A careful diagnosis of the problem facing the organization was undertaken and "good" goals emerged. (27)

A number of other cases cited in Bower and Christenson, Public Management: Text and Cases, illustrate how to organize and budget to achieve strategic goals (and legislative intent in government agencies). The authors emphasize the need to develop feasible and clearly understood goals in effective strategic planning. (28)

3.3.4 The Value of Business-Derived Strategic Planning and Management Control Technology in the Non-Profit Sector:

The strategic planning and management control concepts and practices of business organizations seem also valid for the non-business world. The transfer of this technology to the non-business sector seems feasible. Such spillover is already beginning to take place. A major advantage of such technology transfer is that the strategic planning process stimulates a rational examination of highly complex issues. Such careful sifting of complex details clarifies issues and permits hidden alternatives to emerge. Such analysis is badly needed in non-business organizations with their multiple and diffuse goals. The inclusion of many people in the planning and control process

facilitates understanding and commitment to the organization's overall goals. Furthermore by this process a common sense of purpose is developed, future events are better anticipated and budgets tied to goals and performance thereby increasing organizational efficiency and effectiveness.

3.4 Strategic Planning and Management Control State-of-the-Art in Higher Education Systems and Institutions:

3.4.1 The Need for Technology Transfer of Business-Derived Concepts, Standards and Practices to the Higher Education Sector:

Long range planning has been practiced in the higher education sector in one form or another for a relatively long period of time. The resulting plans were often comprehensive in nature covering all major functions of the institution. In the 1960's master planning came into vogue as a means of coordinating the growth of state systems of higher education. The Higher Education Facilities Act of 1963 encouraged such master planning. By the end of the 1960's almost all states in the United States had higher education master plans. Halstead's 1974 State-wide Planning in Higher Education outlines this growth and is an extensive handbook of long range planning methodology dealing with problems of functional differentiation, financial aid, admissions, academic programs, retention of students and other matters. (29)

During the era of rapidly growing student enrollment in higher education terms such as "efficiency" and "effectiveness" were not very popular. However now things have changed with student enrollment declining and costs rising. Institutions currently are being forced to re-examine their operations, watch

resource allocation and usage more carefully and restrict expansion of costly facilities. As a result they are searching for ways to link planning and other management activities more tightly in order to survive.(30) Furthermore interest is increasing in business-derived concepts and practices of strategic planning and, possibly, management control in the search for ways of operating more effectively.

3.4.2 Concepts and Standards:

3.4.2.1 Strategic Planning Process:

Proposals to use business-derived strategic planning methods in higher education have been made by Young, Kotler, Hollowood and others. Young proposes that the strategic planning process, as outlined earlier in this paper, be used because of its demonstrated value in profit-making and other organizations. He points out that a consideration of environmental conditions has been overlooked in college and university long range planning in the past. A strategic planning approach, according to him, would provide a mechanism for an internal needs assessment. He believes that properly done environmental and internal needs assessments could lead to formulating goals that the public will support. Continued public support would then assure survival of the institution.(31)

Kotler brings a market-oriented approach to his proposals and recommends fitting the institution to its changing market opportunities. He too recommends that procedures for scanning the environment become a formal part of long range planning.(32)

Hollowood recommends a more complete transfer to the higher education sector of strategic planning practices such as those

developed at the General Electric Company. He suggests that opportunities and constraints be analyzed and that "strategic centers" be identified and used. He also would transfer from the business world concepts of life cycles of products and presumably of institutions. He also suggests that colleges and universities take a broader view of themselves as organizations in the "public trust". (33)

Merson and Qualls visualize strategic planning in colleges and universities as a complete system of planning and resource allocation. They suggest that all the key tasks of managing an institution of higher education should be linked together in this one system. (34) None of the above writers in the field of higher education add anything new to the basic concepts of business-derived strategic planning set forth earlier in this paper.

3.4.2.2 Management Control Process:

As previously defined, management control is the process by which resources are obtained and used effectively and efficiently in the accomplishment of objectives determined during the strategic planning process. There is a new but growing interest in this management control process in higher education spurred by the National Center for Higher Education Management Systems (NCHEMS) the National Association of College and University Business Officers (NACUBO) and public concern over rapidly increasing tuition charges. The NCHEMS program classification has become the standard program display structure in higher education. (35) Both NACUBO and the Higher Education General Information Survey (HEGIS) use the NCHEMS program classification in their reporting and for other technical requirements in the programming area. (36) The programming

process in higher education is, however, largely predetermined by the degree programs offered according to this NCHEMS classification and partly by other functional activities that must support these programs.

The budgeting subprocess of management control has until recently been performed in most higher education systems and institutions as a function with no links to long range planning. Eurich, Tickton and now Micek and others deplore this lack of integration between academic and fiscal planning. (37) NACUBO has therefore recently developed a planning manual for colleges which integrates "planning" (strategic planning and programming) and budgeting. (38) It proposes that 5-year "planning projections" (programs) be established based on assumptions derived from such strategic planning areas as external factors, historical data and internal assessments. NACUBO has also prepared a workbook entitled Financial Self-Assessment dealing essentially with the internal assessment function of strategic planning. (39) Furthermore NACUBO has issued a statement on institutional budgeting as a standard for colleges and universities which sets forth this process in general terms.

Yet, generally accepted accounting principles (GAAP) for higher education as specified by NACUBO and the AICPA at the present time still prescribe a form of fund accounting. (40) This higher education GAAP fund accounting has the same general limitations from the point of view of effective management control as those described in Section 3.3.2.2 above. Similar inconsistencies are found in this current higher education GAAP in the areas of accrual accounting and

and the proper handling of inventories, depreciation and other measures of operating reality. At this time FASB and NACUBO have yet to specify higher education accounting principles eliminating these inconsistencies and conforming them with business-type accounting. However, NACUBO has already indicated its preference for eliminating fund accounting and following FASB's recently issued non-profit accounting conceptual standards contrary to the earlier position taken by the governmental accounting associations. (41) (42) Such a change in higher education GAAP would lead to a major restructuring of college and university accounting systems and their internal and external financial reports. It would conform more with operational realities and should lead in time to improved management control.

As a further strengthening of management control NACUBO now recommends an evaluative "post-performance review" as part of its suggested institutional budgeting procedures. (43) Such comparison of budgeted and actual revenues and expenditures is recommended by NACUBO to measure goal achievement during the budget period. Such a continuous and penetrating analysis of an institution's stewardship of its financial resources is much more effective than the usual non-fiscal performance analysis undertaken by state agencies in the form of program reviews, self-assessments for accreditation purposes, personnel evaluations and irregular management-by-objective (MBO) reviews of accomplishment of institutional objectives.

3.4.2.3 Linkages between the Strategic Planning and Management Control Processes:

A 1972 Carnegie Commission on Higher Education sponsored report concluded that no substantial effort was being exerted in the field of higher education to improve management efficiency by institutional research or by developing computerized management information systems (MIS) or planning-programming-budgeting systems (PPBS). (44) The report noted that the presence of such systems did not necessarily indicate an efficient or effective operation but their absence raised serious questions of "accountability". As a result since 1972 a number of higher education computer models have been developed to improve long range planning using MIS linkages. After 1973 the Exxon Research Foundation granted many colleges and universities funds to establish MBO and MIS capabilities. (45) Such systems as the Resource Requirements Prediction Model (RRPM), Comprehensive Analytical Methods for Planning in University/College Systems (CAMPUS), System for Evaluating Alternative Resource Commitments in Higher Education (SEARCH) and others turned out to be of limited value because their design often failed to take into consideration college and university operating realities. (46)

Recently Jedamus and others have proposed that academic planning and institutional research be linked into one strategic planning function. (47) Furthermore Peterson proposes that "planning" become fiscal planning. (48) However he ignores the problem of linking the strategic planning and management control processes into a unified system of planning and control. There are

many other examples of linkage proposals and suboptimization of the overall management planning and control problem in the higher education literature.

In view of the above attempts at linking the strategic planning and management control processes in higher education there remains a real question of the extent to which this business-derived concept can be adapted elsewhere. Furthermore the differences between public and private higher education could make the linkage problem so difficult to resolve as not to be worth the effort.

3.4.3 Practices in Selected Higher Education Organizations:

Very few higher education systems and institutions to date have developed and implemented strategic planning and management control processes of the type specified in this paper. (49) NACUBO's standards are largely optional in this area. The following examples of aspects of strategic planning at the University of Maryland and the Carnegie-Mellon University and of management control at Stanford University and the State University of New York suggest the current state-of-the-art in higher education.

In 1981 the University of Maryland developed a strategic plan for future guidance stating:

The best method seems to be strategic planning or the rational selection of courses of action that are most likely to bring success in the future, based on a scrutiny of the changing environment, inner strengths, and assessment of new opportunities. (50)

This University of Maryland planning process replaced what it considered to be "too much patching and cobbling". All of the

strategies in this plan were developed after a thorough review of the major forces affecting the future of the University. An environmental scanning was undertaken that looked at the "new society" and the University's role in it. Special conditions at the University were examined along with its location in the State of Maryland. New directions for the University were then proposed. As a result the report sets forth fresh strategies for a future smaller and better university. Programs and fields of service that the University can perform best are to be strengthened. A new concentration upon quality in students, in faculty and in facilities for learning and research is proposed in a new venture to shape the University so that it in turn can shape society.

The Carnegie-Mellon University began doing strategic planning in 1972. It has developed a continuing set of plans using a bottoms-up approach. National issues are examined and the strengths and weaknesses of the University are listed. The final summation of the University's goals are made by its President. These goals are re-examined annually usually with little change. Planning decisions are implemented by the University's budget process and in faculty promotions and salary reviews. National rankings of excellence are used to evaluate the University's performance.

The management control process at Stanford University can be seen at work in its budgeting and reporting functions. The operating budget is developed around the long-term goals of the University. Careful attention is paid to establishing guidelines

for preparation of the operating budget. The budgeting process includes some zero-base reviews of non-academic departments, flexible budgeting formulae and modeling of long-range financial forecasts. The aim of this process is to develop a budget of optimal flexibility balancing academic and administrative needs in proper proportion. No programs are recognized during this budgeting process as having "rights in equity" to scarce resources. Feeding the strong and squeezing the weak is an approach with many similarities to General Electric's resource allocation procedure outlined earlier in Section 3.2.2 of this paper. Stanford's computerized Budget Adjustment Program (BAP) was used to reduce expenditure growth and its Budget Equilibrium Program (BEP) to help achieve budget targets. Both of these models grew out of one initially called "TRADES". (51)

Stanford's basic financial statements are combined in the traditional fund accounting format prescribed by higher education GAAP. These statements give a complete and relatively easy to understand picture of the University's fiscal performance over the past year. The consolidated statement of sources and uses of funds is not audited because such consolidation does not conform yet with current higher education GAAP. (52)

The State University of New York (SUNY) has developed a system for linking programming with budgeting in order to carry out its 1980 strategic (master) plan and priority-setting activities using a 5-year rolling plan/budget concept. (53) This attempt to improve the University's system of management control was spelled out recently in a proposal to the SUNY Chancellor from a committee

headed jointly by the President of the State University at Binghamton and the SUNY Associate Vice Chancellor for Policy Development. A procedure for the "meshing" of academic and support programs with the existing annual budget submission process is outlined in this proposal in a step-by-step sequence along with a method of determining state funding levels and reallocating existing resources. A limited version of this 8-step procedure was followed during 1981-82 in budgeting the 1982-83 funding of the University's state-operated units. During 1982-83 this procedure will be expanded in coverage and detail in developing the SUNY section of the 1983-84 New York State Executive Budget.

This attempt to improve SUNY's management control system parallels enactment of the New York State Accounting, Financial Reporting and Budget Accountability Reform Act of 1981 (GAAP law) mandating similar improvement throughout the entire State government. (54) The influence of both can be seen in the State University section of the 1982-83 New York State Executive Budget. (55)

3.4.4 The Value of Business-Derived Strategic Planning and Management Control Technology in the Higher Education Sector

Comprehensive long-range or master planning is a widespread practice in higher education along with goal setting and the establishment of objectives. Internal need assessments, environmental scanning techniques and reviewing internal strengths and weaknesses are relatively new techniques in higher education having been transferred from the business sector. A major weakness in the higher education sector is the lack of effective management controls

linking programming, budgeting, operating & accounting and performance reporting & analysis in a concerted drive toward improved system-wide and institutional efficiency and effectiveness.

If systems and institutions of higher education are to perform their function adequately in an uncertain future they will have to develop planning and control systems pointed towards increased efficiency and effectiveness. Such systems should lead to feasible strategic plans and effective management controls implementing them. The strategic planning and management control concepts reviewed in this paper point the proper direction and should not be rejected out of hand because of their business sector source. (56)

3.5 Strategic Planning and Management Control State-of-the-Art in Community College Systems & Institutions:

3.5.1 The Need for Technology Transfer of Business-Derived Concepts Standards and Practices to the Community College Sector:

Most of the community colleges in the United States are comprehensive public two-year colleges. (57) Such colleges make up the largest sector of higher education in the country with the California community college system being the largest post-secondary system in the world serving almost 1½ million students. Illinois, Florida, Texas and Michigan also have large community college systems. All of these systems are comparable with New York's community college system in having local decision-making authority over individual institutions along with some degree of over-all State government policy guidance and financing. As a result all of these other state systems can be examined from the point of view of possible technology transfer and compared with New York's system of community colleges.

The recent trend toward separating community colleges from public school systems in states other than New York has accelerated. In California, for example, Proposition 13 is forcing almost complete State financing of a system built upon local control of individual institutions.(58) Effective strategic planning and management control of such centralized/decentralized systems requires more in the way of partnership and cooperation than in the past. Searle Charles' theory is that management and administration in such a system belong at the local level with state level coordination and leadership making control and governance a shared responsibility.(59) The question to be considered therefore is whether business-derived concepts of strategic planning and management control can be adapted for use by such centralized/decentralized community college systems and, if so, how?

3.5.2 Concepts and Standards:

3.5.2.1 Strategic Planning Process:

As detailed in Section 3.4.2.1 above a number of authors have proposed transferring business-derived strategic planning technology to colleges and universities in general. On the other hand there has been relatively little discussion to date in the literature on adapting this technology specifically to community college systems and institutions.

In some states the over-all planning and coordination of higher education, including the community college sector, is the responsibility of a 1202 commission.(60) Thus the California Post-Secondary Education Commission reviews proposals for new community college programs and facilities to assure compliance with

California's over-all Master Plan for Higher Education - the 1960 strategic plan differentiating the roles of all sectors of higher education in the State including community colleges.(61) Where there are state community college boards they approve the educational plans and programs of community college districts and institutions. In California the Board of Governors of the California Community Colleges does this on an annual basis through the budgetary process but California's Community Colleges Long-Term Finance Plan: Recommendations for the 1980's suggests the plan be a guideline as detailed below in Section 3.5.3 (62) Likewise, in Illinois the Illinois State Board of Community Colleges is required to provide state-wide planning and coordination of community college programs, services and activities.(63)

In both California and Illinois the community colleges by law and practice fulfill a clearly recognized role of extending educational opportunity to the community and have developed the broad pattern of programs needed to achieve this goal. The following Florida statement of the objectives of its community college system would apply as well in most other state systems in this country:

The following statements summarize most of the policies which are required to enable community colleges to fulfill their assigned roles in providing post-high school education for the citizens of Florida.

1. The major purpose of the community college is to extend educational opportunity at less than the baccalaureate degree level to persons in the community.

2. Programs of occupational education should be provided in the community colleges to the extent needed in each area of the state . . .

4. Community colleges should provide continuing education opportunities for adults . . .

8. Educational opportunity should be available within commuting distance for all citizens of Florida. (64)

Similar strategic objectives are found in many other state community college strategic planning documents.

3.5.2.2 Management Control Process:

As defined above, management control is the process by which resources are obtained and used effectively and efficiently in the accomplishment of objectives determined as a result of the strategic planning process. The initial management control subprocess of programming determines the nature and size of the several programs to be undertaken in order to meet agreed-upon goals. Such programming should occur at both the state and local institutional levels because of the magnitude of state aid provided most community colleges in this country. However, examples of conscious efforts to program such community college activities and accompanying resources over a number of years, particularly at the institutional level, are hard to find. If community college programming is done at all it is as part of the annual or biennial budget cycle. (For examples see Section 3.5.3 following)

Budgeting in almost all community colleges involves some kind of local and state interaction. In Florida, the presidents of the individual community colleges develop budgets for local board approval in a format prescribed by the state. (65) A composite community college budget developed by the State Education Department Division of Community Colleges is included in the

State of Florida's annual budget inasmuch as since 1971 Florida's community colleges are almost entirely state funded.(66) In Texas 7 community college cost categories are eligible for state support based on a contact hour formula. These categories are: General administration & student services; Institutional-wide expenses; Staff benefits; Faculty salaries; Departmental operating expenses; Instructional administration; and Library expenses.(67) The Coordinating Board of the Texas College and University System approves the levels of state aid for individual community colleges in Texas.(68) In Illinois credit hour grants from the state are allocated among community college districts on the basis of enrollment and instructional program cost.(69) These Illinois grants make up the difference between the total resources required by the district and those available from local tax revenues, student tuition and Federal grants. Detailed rules covering community college district budgeting are set forth in Illinois law.(70)

In California a detailed 50-page budget format has been developed by the Board of Governors of the California Community Colleges for community college district use. This combined budget/financial report makes an interesting comparison of actual district costs for the past year with current budget costs on an incremental basis. The 1978 California Community College Budget and Accounting Manual issued by the Chancellor specifies an activity-centered approach to expenditure reporting. This activity structure is compatible with NCHEM's program classification structure. It provides the

California community college districts with a basis for comparative fiscal analysis and for future development of program budgeting.

As noted above NACUBO and the AICPA have developed generally accepted accounting principles (GAAP) for colleges and universities. but the extent to which these principles of accounting are followed by state community college systems and individual institutions is not clear. However, it is clear that the California Community College Budget and Accounting Manual for example does not comply with GAAP. In California either a cash or accrual accounting system is acceptable in community college districts.(71) Florida on the other hand requires accrual accounting in conformance with GAAP in its Accounting Manual for Florida's Public Community Colleges.(72) Florida also requires that costs be reported from its community college cost centers.

The 1981 Manual for Uniform Financial Reporting - Michigan Public Community Colleges issued by the Michigan State Board of Education outlines clearly and concisely accounting policies for both record-keeping and reporting purposes in conformance with GAAP. Broad categories of current and non-current funds are used and the format of the financial report conforms with the:

Accounting principles outlined in the American Institute of Certified Public Accountants' audit guide, Audits of Colleges and Universities.(73)

Florida requires an annual audit of its community college

financial statements by independent certified public accountants (CPA's). These reports are submitted to the Florida Auditor-General and the local college board of trustees. In both Michigan and California such CPA audits are also required by law. In Michigan a summary of the audit report must be published in a local newspaper. Copies of these audit reports are also sent to the Michigan State Board of Education and made available for public inspection as a condition for receiving state aid the following year.(74) This is not unlike the Illinois law which requires an audit in conformance with generally accepted auditing standards and verification of student enrollment claims.(75) Such CPA audits have been required in California since 1951. However, a 1980 report of the California Auditor-General found the following weaknesses in such CPA audits: Omitting reasons for not including fixed asset accounts and lack of reconciliation of fund balances with those reported to the state in the annual financial and budget report. Non-compliance of such CPA audits with state audit standards was considered high with most audit reports filed after prescribed deadlines.(76)

3.5.2.3 Linkages between Strategic Planning and Management Control Processes:

The management control subprocess of programming is a long-term planning process that links the goals created in strategic planning to their implementation in the budgeting, accounting and reporting & analysis subprocesses of management control. No clear evidence of this kind of linkage can be documented in any community college system or institution reviewed to date. However, the planning/accountability process proposed

for California's community colleges in the long-term finance plan referred to in Section 3.5.1 above has many elements of a strategic planning/management control linkage.

Page 10 of the Board of Governors of the California Community College's Long-Term Finance Plan: Recommendations for the 1980's states:

The process would enable districts to determine and describe their preferences and the needs of their communities to the Board of Governors which, after appropriate review, can inform the Legislature and state executive and federal agencies about community college activities throughout California. Existing district plans would be consolidated into one plan with annual updates. Existing data sources would be used as much as possible and certain unnecessary legal requirements of districts would be eliminated.

Each district would describe all proposed program changes in its annual plan submittal. Those program changes requiring increased funding in districts' base budgets could be proposed for inclusion in the Governor's Budget and undergo the budget review process, whereas funding for inflation and workload changes are specified by formula in statute.

The Board of Governors would establish explicit statewide objectives as guidelines for district planning and state evaluation.

(For further details see the following Section 3.5.3)

3.5.3 Practices in Selected Community College Systems and Institutions:

The practice of strategic planning (long-range or master planning) has spilled over into the community college area from other higher education sectors. Public community college systems have developed "master plans" in the past somewhat in the manner of other state-wide systems of colleges. Experiments with management control processes in the form of management by objective (MBO) and of linking planning with such processes have been attempted at a relatively unsophisticated level. Some recent examples of

strategic planning and management control practices in the California community colleges, the Maryland community college system and at the Gadsden State Junior College in Gadsden, Alabama follow.

The Board of Governors of the California Community Colleges developed the Long-Term Finance Plan: Recommendations for the 1980's in 1979 following passage of California's Proposition 13 after a year of extensive discussions with community college administrators, state-level executives and members of the Legislature. This plan reaffirms the colleges' comprehensive open-door community oriented mission. It further reaffirms the tuition-free policy of California's community colleges. The plan seeks:

to establish a clearer sense of what our community colleges are expected to accomplish, to insure adequate resources to accomplish those tasks and to provide a sounder basis for the public and its elected officials to assess the return of their investment in the colleges. (77)

Thus the recommendations of this California strategic plan focus specifically on management control and include formula funding, instructional work-loads based on incremental costs, and program changes that comply with statewide objectives. In return for increased state control and continued state support local community college districts would have more freedom to plan, to manage and to schedule their human and physical resources, particularly in areas of staffing, calendar, course scheduling, facility utilization and student mobility among districts. User fees for community services are proposed. Wider use of local colleges by businesses and other groups is recommended especially for employee retraining programs. It is expected that these actions will increase revenue sources to replace the earlier reliance on property taxes cut back

by Proposition 13.

The Maryland community college system developed a State Plan for Community Colleges in Maryland - Fiscal Years 1981-1986 in 1980. The plan restates the mission of the system and limitations upon it. It sets forth goals and benefits to society that should result from their achievement. The consequences of not resolving identified policy problems are itemized. State aid to the community colleges for the next 6 years is projected, along with full-time equivalent (FTE) enrollments by college, costs per FTE and net expenses. Expense projections are broken down for individual colleges by year and by standard function classifications. Present and future programs are tabulated by HEGIS codes. An update of this plan covers 1982-1987 and includes revised and rolled-over cost projections. These plans are consistent with both the Maryland Statewide Plan for Post-Secondary Education and the Maryland State Plan for the Administration of the Vocational-Technical Education Program. (78)

Gadsden State Junior College faced the problem of an eroding resource base and that its existing budgeting system would break down under this pressure. The College devised a new resource allocation system integrating planning with budgeting so as to allocate resources on a priority basis. Planning and budgeting guidelines were developed. Program plans were prepared and integrated into a single budget. This new allocation system was not wholly successful because of the lack of program cross-walking and the many new details that confused the program managers. (79)

4. NEW YORK COMMUNITY COLLEGE CURRENT STRATEGIC PLANNING & MANAGEMENT
CONTROL LAW & PRACTICE:

4.1 Organization of New York State's Community College System:

The Board of Regents, appointed by the New York State Legislature, has overall jurisdiction of all institutions within The University of the State of New York.(80) The State University of New York (SUNY) and the City University of New York (CUNY) are components of this state-wide university system. As a result all of New York's 37 community colleges are indirectly under the jurisdiction of the Board of Regents as 30 of these colleges are under the program of SUNY and the 7 in New York City are a part of CUNY.(81) Furthermore, by executive order of the Governor, the Board of Regents is designated the 1202 Commission for the over-all planning and coordinating of post-secondary education in New York State.(82)

The jurisdiction of SUNY's Board of Trustees, appointed by the Governor, over its community colleges is shared with local community college boards of trustees, the majority of whose voting members are appointed by the college's local sponsor. The individual SUNY community college boards of trustees have responsibility for the college's buildings, grounds and equipment and have "such other powers . . . and duties as may be provided by law or prescribed by the state university trustees".(83) The 7 CUNY community colleges are under the direct jurisdiction of the CUNY Board of Trustees, the majority of whom are appointed by the Governor, and have no individual college boards of trustees as in the SUNY system.(84) The CUNY trustees are responsible for the governance, maintenance and development of their community college units.

With the above organizational structure, including a decentralized SUNY community college sector and a centralized CUNY one, management planning and control of New York State's community college systems could hardly be expected to be a straightforward and simple process and it is not.(85)

4.2 New York Community College Strategic Planning:

4.2.1 Controlling Law and Regulation:

4.2.1.1 Specifying the Basic Objectives and Governing Policies of New York's Community Colleges:

The basic objectives and governing policies of all New York community colleges are specified in Article 126, Section 6303.1 of the State Education Law as follows:

Community colleges shall provide 2-year programs of post high school nature combining general education with technical education relating to the occupational needs of the community or area in which the college is located and those of the state and the nation generally. Special courses and extension work may be provided for part-time students.

Furthermore Section 6304.1a(i) of the Education Law states that community colleges electing to become "full opportunity colleges" shall:

establish a policy of offering acceptance in an appropriate program of the college to all applicants residing in the sponsorship area who graduated from high school within the prior year and to applicants who are high school graduates and who were released from active duty with the armed forces of the United States within the prior year;

The above Education Law sections apply to both SUNY and CUNY community colleges. Furthermore, Section 6202.4 of the Education Law dealing only with CUNY community colleges states:

The term 'community college' shall mean an institution of higher education in the city of New York, which is governed and administered as such by the (CUNY) board of

trustees on July first, nineteen hundred seventy-nine, whose primary purpose is providing certificate and associate degree post secondary programs in general and technical educational subjects, and is receiving financial assistance from the state as a community college. Article one hundred twenty-six of this (Education Law) chapter shall continue to apply to such institutions but they shall hereafter be governed by the (CUNY) board of trustees in accordance with the provisions of this article.

No New York State community college strategic planning can ignore the above mandates.

4.2.1.2 Specifying the Strategic Planning Procedures of
New York's Community Colleges:

New York State's general higher education strategic planning procedures affecting its community colleges are specified in the Board of Regents, SUNY and CUNY master planning provisions of the Education Law. New York State has no law requiring specific master planning by its community college systems or component institutions as such. (86)

The New York State Board of Regents is required by Education Law Section 237 to develop a statewide plan for higher education in New York State every 4 years incorporating the master plans of SUNY, CUNY and available plans of private institutions. The Regents may add plans dealing with such matters as "improvement of institutional management and resources, instruction, guidance financial aid restraints, and the extension of educational opportunities. The purpose of this Regent's state-wide plan is to define and differentiate the objectives of the various sectors of higher education in New York State including its community colleges; to

identify society's needs and problems; and to develop timetables with priorities in enough detail to enable the results to be evaluated. (87)

The SUNY Board of Trustees is required by Education Law Section 354 to formulate long-range State University plans and make recommendations to the Board of Regents and the Governor:

For the organization, development, coordination and expansion of the state university and for the establishment of community colleges in areas suitable for and in need of such institutions, which plans and recommendations shall include the following:

- a. Plans for new curricula.
- b. Plans for new facilities.
- c. Plans for change in policies with respect to student admissions.
- d. Potential student enrollments.
- e. Comments upon its relationship to other colleges and universities, public and private, within the state.
- f. For informational purposes only, projection standards and overall expenditure projections of capital and operating costs . . . (88)

The CUNY Board of Trustees is required by Education Law Section 6206.3 to formulate a long-range City University plan and make recommendations to the Board of Regents following the above SUNY procedure, except for the establishment of community colleges. However Education Law Section 6213 gives the CUNY Board of Trustees discretionary power to establish new community colleges. Furthermore, any existing SUNY plans pertaining to New York City community colleges are now recognized as part of CUNY's master plan. (89)

4.2.2 Actual Practices:

4.2.2.1 Of the New York State Board of Regents:

Actual strategic planning (long-range planning) in the area of

higher education by the New York State Board of Regents is exemplified in its latest plan entitled The Regents Statewide Plan for the Development of Postsecondary Education, 1980. This plan sets forth very broad goals of excellence, access, diversity and the effective use of resources by all institutions of higher education in the State including objectives in occupational education for the community colleges.(90) Total community college enrollment projections for the period 1980 through 1983 are given with low and high ranges for the years 1984 and 1988. There is little else in this plan about New York's community colleges. It does indicate, however, which goals of SUNY's plan are approved. (CUNY has no recommendations in its 1980 plan.)

4.2.2.2 Of the SUNY System:

The current 1980 Master Plan of the State University of New York prepared by SUNY's central administrative staff sets forth programmatic profiles for each of its 30 community colleges in terms of the percentage of full time equivalent (FTE) enrollments as inputs and of degrees and certificates awarded as outputs by major academic program area. The Plan specifies in brief the strategic plans of each community college as prepared by individual units. These individual community college strategic plans present the overall goals and directions of their academic programs but do not deal with other functions of the college including student services, academic support programs and maintenance and operation of plant. The SUNY Plan projects ranges of total FTE enrollment targets for the community colleges for the 1980's. It recommends,

for example, that new flexible funding formulae be developed to meet new and changing institutional demands within the SUNY system including those of the community colleges. Other recommendations, though not specifically directed to the community colleges, are in broad enough language to be applicable to them. Furthermore, many of these recommendations could be used by the individual community colleges for the development of their own goals and objectives.

In the past each SUNY community college contributed to the development of SUNY master plans by submitting its own campus plan to SUNY first. At other times the individual community colleges developed their own master plans conforming with an agenda of topics and items specified by SUNY. Upon occasion the community colleges also participated in SUNY regional planning conferences as part of the master plan development process.(91) With the recent development of its multi-phase rolling plan discussed above in Section 3.4.3 SUNY has recommended that each community college develop its own campus plan in conjunction with SUNY-required 5-year program reviews or as a part of the Middle States Association of Colleges and Secondary School's reaccreditation process.(92)

The strategic planning practices of the individual SUNY community colleges vary greatly from college to college as illustrated below. For example, Dutchess Community College in Poughkeepsie has developed annual plans for the past 3 years which establish short-term goals and objectives in a planning cycle coinciding with the College's budgeting process. Environmental factors affecting

the institution are considered. Even so, the resulting Dutchess Community College plan is more an action plan for broad functional areas of College activity than a strategic plan for a unit within a statewide community college system.(93) Hudson Valley Community College in Troy is presently updating its local "strategic plan". The Columbia-Greene Community College in Hudson does this each year at a faculty/administration retreat. The Tompkins-Cortland Community College in Groton revised its 1970 plan in 1979 and included a WOTS-up analysis.(94) Broome County Community College in Binghamton sets forth in its strategic plan only the mission of the college and goals for its major programs & activities along with sub-goals and objectives.(95)

4.2.2.3 Of the CUNY System:

The 1981 Master Plan of the City University of New York for the Next Decade is the most recent CUNY strategic (master) plan. It outlines the present and future programs of its two comprehensive community colleges (Bronx and Queensborough) and of its five diversified ones (Kingsborough, Borough of Manhattan, LaGuardia, Medgar Evers and Hostos). It also outlines the facilities planned for its colleges. It projects community college enrollments for the rest of the decade and analyzes the urban environments of these colleges.

CUNY does not require its individual community colleges to develop local strategic plans. However, these colleges do develop campus plans for their own use similar to those prepared by the SUNY ones. The Borough of Manhattan Community College, for example, is actively engaged in such planning.

4.2.2.4 Of Other Higher Education Planning Bodies:

The legally required strategic planning activities (long-range master planning) affecting New York's community colleges specified above is supplemented by the research and recommendations of special advisory commissions on higher education appointed by the Governor, State Legislature and other responsible bodies. (96) The most recent of these ad hoc bodies was the Temporary State Commission on the Future of Postsecondary Education in New York (Wessell Commission) which submitted its report to the Governor and Legislature in March, 1977. This report stated that:

. . . the Commission gave only modest study to the problems and concerns of the community colleges. This segment has continued to grow relative to all other types of postsecondary institutions and is therefore suffering least in the overall level of funding. We are convinced that the character of these institutions and their relationships to the communities they serve are evolving and maturing in distinctive ways. We have offered recommendations which will facilitate this evolution by improving the funding allocation mechanism and by clarifying the roles of the board of trustees and the local sponsor in governance of the college. Of all the State's higher educational institutions we are most sanguine about the future vitality of the community colleges. (97)

The actual practice of New York community college strategic planning is further complicated by the policy planning activities of the SUNY Council of Community College Presidents, the Community College Business Officers Association and the local sponsors. All of these groups interpret in their own way the legally mandated objectives of New York's community colleges.

4.3 New York Community College Management Control:

4.3.1 Controlling Law and Regulation:

4.3.1.1 Specifying Programming Procedures:

There is no New York law specifying the use of the programming

process as a management control device by the State's community college systems or other institutions of higher education. However, as specified in Section 4.2.1.2 above the SUNY and CUNY master planning laws require enrollment, operational and capital cost projections for the planning period. Furthermore, Section 602.2 of the Code of Standards and Procedures for the Administration and Operation of Community Colleges under the Program of State University of New York (Code) requires the submission of preliminary community college operating budget estimates, usually for a four-year period.(98) In both cases above however, a forecast or estimate of what will occur is apparently intended rather than a long-term program of action to be implemented in the subsequent management control process.

The identification of programs, the usual first step in programming, is specified in Education Law Section 6303 to apply only to community college academic programs. However, new programs must be registered with the State Education Department following master plan approval.(99) These programs are developed for instructional purposes rather than for management control.

4.3.1.2 Specifying Budgeting Procedures:

The fiscal year of SUNY's community colleges is specified in Education Law Section 6304.5-a as follows:

Notwithstanding the provisions of any general, special or local law to the contrary, the fiscal year of a community college other than in the City of New York and other than one sponsored by a school district, shall begin with the first day of September and end with the thirty-first day of August in each year.

On the other hand the fiscal year of New York State ends on March 31 and that of New York City on June 30 while that of most upstate local

sponsors ends on December 31 which adds to the complexity of New York community college budgeting for State and local sponsor aid.

Education Law Section 6304.1b(iv) authorizes the SUNY Board of Trustees to prescribe by regulation for all of New York's community colleges:

. . schedules and formats for the preparation and submission of annual budgets by the boards of trustees and local sponsors to the state university trustees, schedules of local sponsors' disbursements to the community colleges of their provided shares of operating costs and systems of accounts for use by the boards of trustees and the local sponsors of the community colleges.

Code Sections 602.3 through 602.11 detail the community college operating budgeting process. Appropriate budgetary forms and further instructions are specified in the SUNY Manual for Community College Business Offices. Essentially the Code prescribes a community college annual operating budget centering upon justification of state aid requests. After approval by the college local board and sponsor the budget is then submitted to the SUNY or CUNY Board of Trustees for final approval to assure conformance with legislative appropriations of state aid for community colleges and regulatory limitations on operating costs. Education Law Section 6229 requires that the form and contents of CUNY's community college operating budgets be the same as that approved by the State Director of the Budget for SUNY's. In addition the Mayor of New York City is required to certify to the State Budget Director the amount of sponsor support for CUNY community colleges he expects to include in the City's following year Executive Budget.

Community college capital budgeting procedures are specified in Code Section 603.3:

Capital budgets, unlike operating budgets, do not terminate annually but are continuing. Once approved by the local sponsor and the University trustees, capital budgets can be amended by action of the sponsor and State (or City) University trustees. A separate capital budget is required for each project.

After approval of a community college capital project by the local sponsor and either the SUNY or CUNY trustees it is submitted to the Governor's Budget Division for final approval and inclusion in the Executive Budget inasmuch as the State pays for half the cost of such projects.

4.3.1.3 Specifying Operating & Accounting Procedures:

Education Law Section 6304.1b(iv) specifies that the SUNY Board of Trustees may prescribe:

. . .systems of accounts for use by the boards of trustees and the local sponsors of the community colleges . . .

Code Section 602.1(b) therefore states:

Records and accounts must be maintained in accordance with the Uniform System of Accounts for Community Colleges as prescribed by the State Comptroller, and shall be subject to audit by the State.

Currently the State Comptroller's prescribed Uniform System of Accounts for Community Colleges is on a modified cash basis and does not conform with the modified accrual basis of generally accepted accounting principles (GAAP) for higher education as specified by NACUBO and the AICPA. Furthermore, the Comptroller's uniform accounting system does not comply with governmental GAAP as prescribed by the National Council of Government Accountants and the AICPA.(100) In addition all community college real property

accounts are maintained by the local sponsor who holds title to the college's buildings and land in conformance with Code Section 603.5 (based on Education Law Section 6306.4. On the other hand title to some fixed assets, including movable equipment such as automobiles, purchased through the College's operating budget is in its trustees!

4.3.1.4 Specifying Reporting & Analysis Procedures:

Section 30 of the New York General Municipal Law requires that:

1. . . . every municipal corporation and school, fire improvement and special district (including community college) shall annually make a report of its financial condition to the controller . . .
5. All reports shall be certified by the officer making the same and shall be filed with the comptroller within sixty days after the close of the fiscal year of such municipal corporation, district, agency or activity . . .

Code Section 602.12 therefore states:

Annual financial report. (a) Pursuant to section 30 of the General Municipal Law, the annual financial report shall be certified by the chief fiscal officer of the college and shall be filed with the State Comptroller within 60 days after the close of the college fiscal year. The chief fiscal officer is the college treasurer for purposes of this certification.

(b) The annual financial report shall be in compliance with Article 126 of the Education Law, this subchapter, the Uniform System of Accounts for Community Colleges, and the manual for community college business offices, and on the forms and in accordance with instructions promulgated by the State Comptroller.

(c) The State University of New York, which shall also receive copies of the annual financial report, shall review the annual financial report for the purpose of initial determination of the State liability.

(d) Any overpayment in State financial assistance for operating costs, as determined in the review of the annual financial report, shall be deducted from the second quarterly advance payment of State aid for the succeeding college fiscal year.

(e) The college shall be subject to State audit by the Department of Audit and Control (State Comptroller) for the purpose of the final determination of the State liability.

Pursuant to Education Law Section 6221B, the above Code Section 602.12 is equally applicable to the combined annual financial report of the 7 CUNY community colleges.(101)

Regarding independent audit of New York community college annual financial reports Education Law Section 6304.6 states in part that:

The board of trustees of the college shall provide for periodic audits of all accounts maintained at its direction and render such reports respecting any and all receipts and expenditures of the college as the local legislative body or board, or other appropriate governing agency, may direct.

Code Section 602.1(c) therefore states:

The records and accounts of the community college shall be audited annually by a certified public independent accounting firm or the agency of the sponsor responsible for the performance of audits.

It should be noted that such independent audits are not legally required to be in conformance with generally accepted auditing standards asprescribed by the AICPA.

Education Law Sections 354.3 & 6206.3(c) require master plan progress reports every 4 years by both the SUNY and CUNY boards of trustees covering the community colleges under their jurisdiction.(102) Furthermore, Education Law Section 6304.1b(iii) requires that the SUNY (and CUNY) Board of Trustees shall:

. . .on or before December thirty-first in each year, make a report to the governor and legislature as to the status of community college programs and curricula provided for in article one hundred twenty-six of this chapter. Such report shall also contain recommendations for any revision or alteration in the formula for financing the operating costs of community colleges.

In addition Code Section 604.3(d) requires each community college

president to:

submit an annual report on the operation of the college to the college trustees, and prepare such other reports as the college trustees or the State University of New York may require.

4.3.2 Actual Practices:

4.3.2.1 In Programming:

At present New York's community colleges do no programming in the sense specified earlier in this paper. On the other hand both the SUNY and CUNY community college systems and the individual institutions do some forecasting of future operations through the use of preliminary operating budgets projecting 2 years into the future **and** lists of capital projects for the next 5 years.

These projections are not considered firm programs to be subsequently implemented through a management control process.

SUNY has taken steps this year to include its community colleges in its "meshing planning with budgeting" process. As an initial step, SUNY has requested 5-year enrollment projections and program offering statements from its community colleges as part of its Multiphase "Rolling Plan" budgeting/planning cycle.(103) However there is no indication that even these projections will constitute programming in the management control sense specified earlier in this paper.

4.3.2.2 In Budgeting:

The actual practice of budgeting in New York's community colleges varies depending whether the institution is part of the SUNY or CUNY system.

Budgeting for operations in New York's SUNY community colleges starts 1½ years before the college September to August fiscal year begins with the submission in July to SUNY of the preliminary operating budget request forms containing second year budget projections. These projections are consolidated in August by SUNY into an annual budget request for state aid for community colleges. The request is submitted to the Governor around October for inclusion in the Executive Budget of the following State Government April to March fiscal year. The same Executive Budget also recommends a SUNY community college appropriation for the subsequent college fiscal year.(104)

At approximately the same time in August as SUNY is consolidating these preliminary budget projections it is analyzing and approving the community college operating budget requests for state aid for their next fiscal year starting in September. These operating budget requests are in a functional or programmatic format and contain additional data supporting community college state aid requests.

SUNY analyzes these budget requests in order to ascertain over-all compliance with State mandates and available appropriations. If a college's state aid request is faulty, the differences are resolved by negotiation. At the time of these SUNY analyses the amount of community college state aid has already been appropriated by the Legislature upon approval by it in March of the Executive Budget. Also at this time, as indicated above, the community college preliminary operating budgets have also been received by SUNY so that it is possible to reconcile state aid amounts by the State's April to

March fiscal years with community college budget requests covering their September to October fiscal year. Upon completion of analysis the individual community college budgets are submitted to the SUNY Trustees for approval and notification to the institutions of their authorized state aid for their fiscal year beginning in September.

Concurrently, while the SUNY community college budget request approval process outlined above is occurring, starting in October SUNY develops with the Governor's Budget Division the proposed community college state aid request for inclusion in the next Executive Budget to be submitted to the Legislature the following January for appropriation in March. This appropriation provides the basis for the next SUNY community college budget review process as outlined above. (105)

The individual SUNY community college budgeting process varies by institution but ends with the Operating Budget Request for State Aid submitted to SUNY in the program and object of expenditure format specified in Section 13 of the Community College Business Offices Manual.

The colleges usually begin their operating budgeting process by developing projected enrollments, resulting student credit hours and the anticipated revenues for the budget year. At Dutchess Community College, for example, an enrollment committee starts early in November to prepare full and part-time headcounts, credits and FTE's as the basis for budget development. This data is refined as soon as the Spring enrollment picture is stable. It is further refined at the time of pre-registration in May for the Fall semester. A series of incremental

pro-forma budgets are built on these estimates of enrollment tuition charges and state aid. Academic support services and administrative departments prepare object of expenditure budgets. Following budget review sessions these budgets are combined into a total college object of expenditure budget to be incorporated later upon approval into the College's budget appropriation accounts. The budgeting process is incremental in nature based on past expenditure ratios and community college ranking. Around April, after passage of the Governor's Executive Budget, the colleges receive from SUNY an estimate of operating state aid dollars to be received based on projected FTE enrollments submitted earlier by them.(106) At this point the final college budget is set including conformance with SUNY maximum limitations and determination of the local sponsor's contribution. The budget is then reviewed and approved by the College's Board of Trustees and the local sponsor and forwarded to SUNY for its approval.(107) Almost all upstate local sponsors are counties with fiscal years starting the following January to complicate matters further.

The actual practice of budgeting for operations in New York's CUNY community college system follows in general that of SUNY's with the following major exceptions. The first of these exceptions is that the fiscal year of the CUNY community colleges is from July to June as is that of CUNY itself and the City of New York. Furthermore, the Mayor of New York City, which is the local sponsor of the CUNY community colleges, informs the Governor's Budget Division by October of the amount he will recommend in the next City budget for these institutions. In addition, the CUNY community college budgets are all developed by the CUNY Chancellor once the amount

of available state and city aid has been determined by the City Comptroller. This practice is contrasted with that of SUNY where each community college prepares its own budget. The individual CUNY community colleges are informed by the Chancellor of the amounts they may spend by program and service classifications and FTE staff positions but are given some flexibility in transferring between classifications. Both the composite CUNY community college system and individual institution budgets are approved by the CUNY Trustees and the Mayor of the City of New York. The appropriation accounts for the CUNY community colleges are maintained by the New York City Comptroller.

Budgeting for capital projects in both the SUNY and CUNY community colleges starts with a 5-year roll-over capital request plan by project submitted for approval by the local sponsor and the State. When a project is approved for 50% support by the State and appropriated a multi-year budget covering the life of the project is developed by the local sponsor as prescribed in Code Section 603.2. CUNY's capital budgeting procedures follow those of its operating budget. Community college capital construction may be financed by the local sponsor or by the Dormitory Authority of the State of New York for SUNY community colleges or by the City University Construction Fund for the CUNY ones. Title to the completed project is held by the local sponsor, or by the financing authority until paid when it reverts to the local sponsor.(108) Capital charge-backs received from other counties for non-resident community college students are held by the local sponsor in a separate account to be used for facility costs, debt service and other items prescribed by Code Section 603.7.

4.3.2.3 In Operating and Accounting:

Accounting practice in New York's community colleges should measure and record the operations of the systems and the colleges within it. A full accrual accounting system in conformance with generally accepted accounting principles (GAAP) would do this in a fully standardized manner so that the operations of different systems and colleges can be measured and compared. However, in New York the 1981 State Comptroller's Uniform System of Accounts for Community Colleges, prescribed for all New York community colleges by Education Law Section 6304.1b and Code Section 602.1(b), does not conform with GAAP. It does not conform with either higher education GAAP, as prescribed by NACUBO, or government GAAP, as specified by the National Council of Government Accounting and endorsed by the AICPA, because it is on a modified cash basis rather than an accrual one. However, the individual SUNY community colleges usually do not maintain their accounting systems in conformance with the Comptroller's prescribed uniform system but account on either a straight cash basis or some type of modified accrual basis using their own or their sponsor's unique account classifications. As a result the uniform community college Annual Report prescribed by the Comptroller is produced by adjusting end-of-year results of the individual college accounting systems to conform. Furthermore, most SUNY community colleges maintain budget appropriation accounts by object of expenditure rather than by program consistent with historical practice in New York State. (109)

The CUNY community college accounts are maintained by the

New York City Comptroller. The CUNY Comptroller and the upstate local sponsors maintain the community college fixed asset accounts dealing with land and buildings.

The New York Community College Business Officers Association and the State Comptroller's Office recently considered maintaining accounts in conformance with NACUBO higher education GAAP. A representative of the Comptroller's Office prepared materials on revenue categories and expenditure functions in conformance with higher education GAAP for review by the community college business officers. After reviewing this material on GAAP the business officers in the Spring of 1979 decided not to proceed further as it would require a radical conversion of their existing accounting systems. Whether or not New York community college accounts will be made to comply with GAAP either by law or Comptroller regulation remains an open question.

4.3.2.4 In Reporting & Analysis:

Actual reporting and analysis of New York community college operations is at the financial, management and performance levels and verified by outside audit.

All of New York's community colleges (including the CUNY ones as a unit) submit an unaudited annual "official" financial report to the State Comptroller with a copy to SUNY in a predetermined format based on the Comptroller's uniform system of accounts for community colleges discussed above. (110)

In addition, most SUNY community colleges now produce CPA audited annual financial reports in conformance with GAAP which do not necessarily conform with their "official" modified cash basis financial report

submitted to the State Comptroller.(111) A summary annual financial report of New York's entire community college system is included as an appendix in the Comptroller's report to the Governor and Legislature entitled Financial Data for School Districts.

Another summary annual financial report of SUNY's community colleges entitled State University of New York Community Colleges, Revenues, Expenditures & Fund Balances Statistical Analysis, Annual Report is also issued annually by SUNY.

Both of these summary financial reports are based on the Comptroller's "official" community college annual financial reports. It is only recently that the State Comptroller has requested community colleges to forward copies of their CPA produced annual financial reports. Of the above reports only the Comptroller's "official" community college annual reports compare budget with actual.(112)

Various management reports are made by the community colleges to the SUNY and CUNY central administration. The most extensive system of management reports is that developed by SUNY's Office of Institutional Research & Analytical Studies which include student demographic data of all kinds including head counts and student credit hours, reports of technical and business programs, degrees awarded by program and sex, etc. These reports help to account for budget expenditures and to provide data for new budget cycles. When aggregated by SUNY the data helps in the identification and control of state aid expenditures. It also provides an audit trail for compliance audits by the State Comptroller of individual institutions. SUNY also includes this data in its University-wide publications. Furthermore the data is used by SUNY in reports to

the State Legislature, the Board of Regents and to the National Center for Higher Educational Statistics through the HEGIS reporting system. CUNY has not developed this type of management reporting system on such an extensive scale for its community colleges.

Progress and performance reports are also prepared by SUNY, CUNY and the individual community colleges relying to a large degree on the management reports discussed above. First and foremost of these reports is the biennial Progress Report of the Implementation of the Master Plan such as that issued by SUNY in 1978. This SUNY report is submitted to the Governor and the Regents and indicates in summary fashion progress made in carrying out the recommendations approved in the previous master plan.(113) It includes over-all enrollment revisions and lists approved amendments to the master plan. CUNY's progress reports follow a similar pattern. SUNY also prepares annual reports. These reports are for public distribution and provide an easy-to-read overview of the University's activities as a whole without detailed financial information. (114)

The CUNY system issues similar types of reports.(115) SUNY's community college presidents make regular verbal reports to their boards of trustees. In addition the individual colleges are now starting to issue annual reports for public distribution similar to SUNY's. (116)

Community college capital construction performance reports are prepared by the local sponsor as required by Code Section 603.8.

The only independent financial audits of the SUNY system

of community colleges are performed by independent CPA's at the institutional level as prescribed by Education Law Section 6304.6 and Code Section 602.1(c). Because of a general lack of conformance of individual community college accounting systems with either the Comptroller's uniform system of accounts or GAAP it has been necessary for the reports to be both produced and certified by the CPA.(117) At the present time the CPA-certified community college financial reports are used by neither the State Comptroller's Office nor SUNY in producing their over-all system financial summaries. Recently however as noted above the colleges have been requested to submit copies of their CPA-certified financial reports to the State Comptroller's Office with a view to possibly substituting them eventually for the "official" financial reports now required to be submitted.(118)

In conformance with General Municipal Law Section 33 as detailed in Code Section 602.12(c) the State Comptroller about every 5 years makes a compliance and performance audit of New York's individual community colleges emphasizing conformance with state mandates regarding calculation of state aid requests.(119)

In conclusion, it appears that current New York community college strategic planning and management control law & practice seriously deviates from the state-of-the-art as outlined earlier. A specific analysis of the variances between the state-of-the-art and current New York State practice follows in the next section.

5. ANALYSIS OF VARIANCES BETWEEN STRATEGIC PLANNING AND MANAGEMENT CONTROL
STATE-OF-THE-ART AND NEW YORK COMMUNITY COLLEGE PRACTICE:

An analysis of the variances or differences between strategic planning and management control state-of-the-art and the current law and practices of New York community college systems and institutions follow. Included in this analysis is a summary of the state-of-the-art as depicted in Section 3 above and its differences from existing New York community college law and practice detailed in the preceding Section 4 together with some indication of what it would take to bring New York up to the state-of-the-art. This variance analysis parallels the general pattern followed above in depicting both the state-of-the-art and New York current law & practice.

5.1 In Strategic Planning:

Strategic planning state-of-the-art in the business sector does not follow one definitive model but a set of concepts that are applied in the process of deciding on goals, changes in these goals, and the resources and policies needed to achieve them. This method of strategic decision-making is time consuming. It is relatively new even in the business world and is found mostly in large business organizations with diversified product lines. It is the prime responsibility of business top management. Hidden alternatives emerge out of ongoing studies of internal strengths & weaknesses and factors affecting environmental conditions. Analyses of these alternatives lead to realistic decisions about long-term future operations and to amended goals and objectives. (For details see Sections 3.2.1.1 & 3.2.2 above)

Strategic planning state-of-the-art in the non-profit and non-business sectors is equally new but much more policy-centered than in business organizations. Policy analysis is used in a type of WOTS-up approach to clarify vague statutory goal statements. Strategic planning in higher education consists largely of long-range planning of enrollments, programs and facilities. Carnegie-Mellon University and the University of Maryland assess aspects of the environment and strengths and weaknesses of their institutions in a manner similar to that used in business strategic planning. Community college systems and institutions also undertake long-range planning but California's Long-Range Finance Plan is a new and remarkable attempt to develop a strategic plan for a state system of community colleges. (For details see Sections, 3.3.2.1, 3.3.3, 3.4.2.1, 3.4.3, 3.5.2.1 and 3.5.3 above)

Strategic planning covering New York community college systems and institutions is not specified as such in state law. Certain aspects of community college planning are included in the master plan requirements of SUNY and CUNY. Furthermore, the Board of Regents is required by law to develop a statewide plan incorporating those of the various sectors of higher education in the state indirectly including matters affecting community colleges. Various special ad hoc advisory commissions, appointed from time to time, undertake research and make proposals of a strategic planning nature that also indirectly affect the State's community colleges. There is no requirement in New York that strategic planning be done directly by its community colleges at either the system or institutional levels. Such strategic planning **activity** affecting New York's community colleges:

as there is derives from historically generated forces operating indirectly through the complicated structure of public higher education in New York State. (For details see Sections 4.2 above)

Some basic differences between state-of-the-art strategic planning and what passes for such in New York's community colleges can now be specified. To start, New York law specifies no generally understood strategic planning concepts or standards for the guidance of the State's community college systems or institutions. Furthermore, such law does not specify a clearly defined process leading to a strategic plan covering all community colleges in the State. In order to bring New York to the state-of-the-art of California, for example, it would be necessary for some single body to coordinate community college strategic planning of both New York's SUNY and CUNY systems and their individual institutions. A complete restatement of New York's higher education master plan law would be required to assign to a single coordinating body this community college strategic planning responsibility. Such a clear statement in law of the objectives of New York's total community college system could also remove existing discrepancies between the SUNY and CUNY systems making clear, for example, whether or not community services and certain student activities are strategic goals of such colleges.

5.2 In Management Control:

Management control in both profit and non-profit-making organizations is the process by which necessary resources are obtained and used efficiently and effectively in accomplishing the objectives determined in the strategic planning process. The

management control process includes the subprocesses of programming, budgeting, operating & accounting and reporting & analysis as outlined above. It covers such activities as preparing budgets, planning levels of staffing, formulating personnel practices, deciding on research activities, planning program improvements, deciding on facility changes & new equipment and measuring & appraising management performance. These activities differ from the operational control process which assures that specific tasks are carried out in response to management control directives.

The management control state-of-the-art is most highly developed in the business sector where it originated. Programming occurs naturally in a business organization following existing product lines making program classification for both budgeting and accounting a relatively easy matter. Clearly specified product line objectives translate easily into measurement by revenue & expense accounting conforming with GAAP. Multi-year financial plans identifying costs and outputs are regularly prepared in the well-run business so that the first year of a five-year program plan rolls over easily into the upcoming year organization and program budgets. Full accrual accounting and financial reporting conforming with GAAP are standard methods of measuring and reporting business operations. Every month an income statement is prepared and checked with the budget and exceptions analyzed. Because business organizations are profit-driven the evaluation of goal achievement is relatively simple and performance measurements clear and precise. (For details see Sections 3.2.1.2 & 3.2.2 above)

Management control state-of-the-art in the non-profit and non-business sectors is generally recognized as being weak when compared with that of business. It is complicated by the fact that often non-profit organization goals are unclear and programs hard to define. The widespread use of fund accounting employing synthetic entities adds to the problem of both goal determination and programming. As a result, program costs cannot readily be determined. A similar low-level management control state-of-the-art is found in higher education including its community college sector. NACUBO's financial standards are optional and presently torn between Financial Accounting Standards Board (FASB) and the new Government Accounting Standards Board (GASB) guidelines. (See Sections 3.3.2.2, 3.3.3, 3.4.2.2, 3.4.3, 3.5.2.2 and 3.5.3 above for details)

Management control of New York's community college systems and institutions is exceedingly weak at both the State and local levels in spite of the magnitude of State and local aid now provided the institutions. Preliminary community college operating budget estimates tend to be forecasts rather than long-term programs of action to be implemented in the management control process. Modified program budgeting required at the SUNY and CUNY system level is still largely object-of-expenditure budgeting and accounting at the local institution level. Program costing is rare in New York's community college systems and institutions. The Comptroller's uniform system of accounts is not consistently followed by New York community colleges whose accounts are further reshuffled to produce financial reports not in conformance with higher education GAAP. Recently instituted State government GAAP requirements do not cover either SUNY's or CUNY's community colleges operating under

either Plan A or C fiscal procedures leaving these institutions unsure of the proper accounting standards to follow. The CPA auditors of the community colleges produce adjusted accrual financial reports differing from the modified cash basis ones required by the State Comptroller with no attempt being made to reconcile such differences. (For details see Sections 4.3 above)

To bring New York community college management control processes up to the state-of-the-art would require a single coordinating body to set standards for the systems and component institutions. Each community college would then become a single responsibility center within a unified State system. Program objectives would have to be clearly specified. Preliminary operating budget estimates would have to be converted into long-term programs for later implementation. The existing NCHEMS program classification structure would have to be fully utilized throughout New York's community college system. Differing fiscal years of the State and local governmental and higher education systems & institutions would need to be standardized. Both program and organization budgets would have to be developed on a standard basis with a capability of comparing actual and budget accounts for the same period. The existing Comptroller's uniform system of accounts would have to be amended to conform with NACUBO and FASB standards. A new financial reporting system along the lines of Michigan's would be needed leading to an accounting/budgeting manual similar to California's instead of the existing set of discrete items in the current New York Community College Business Office Manual. Cost accounting, whether by CASA or some other system, would then be feasible. Financial statements now prepared

by CPA's on a piecemeal worksheet basis could then be derived automatically by computer on a timely basis. All of these changes would help assure a full assessment of community college stewardship to ascertain whether or not agreed-upon goals in the strategic planning process were indeed being accomplished.

5.3 In Linkages between Strategic Planning and Management Control:

The state-of-the-art linkage of strategic planning and management control is automatic in business. Those activities that do not further the established goals of most business organizations are not recognized as programs and hence are not funded in the budgeting process.

The present weaknesses of management control in non-business organizations and higher education, including community colleges, center around a lack of programming as defined in this paper. No linkage between strategic plans and the management control process is therefore-feasible. Yet, California's community college proposed accountability process seeking to consolidate existing district plans into a single statewide one with annual updates, approaches the business-derived concept of allocating resources by program objectives in order to achieve measurable results. (For details see Sections 3.2.1.3, 3.3.2.3, 3.4.2.3 & 3.5.2.3 above)

There is no easily discernible linkage between the strategic planning and management control processes, such as they are, in New York community college systems and component institutions. SUNY is attempting to translate the approved goals of its 1980 Master Plan into internal management control activities centrally and at its state-supported institutions. This "meshing planning and

budgeting^u is now being extended to SUNY's decentralized community colleges and could be the beginning of a programming linkage as defined in this paper. (For details see Sections 4.3.1.1, 4.3.2.1 above)

In order to bring New York's community colleges into compliance with existing state-of-the-art linkage between strategic planning and management control increased attention to programming and to all of the above points is necessary. This is pointed out in Section 5.2 above.

6. STRATEGIC PLANNING AND MANAGEMENT CONTROL FUTURE ALTERNATIVES FOR
NEW YORK'S COMMUNITY COLLEGES:

Weaknesses in New York community college strategic planning and management control procedures have been examined above in Section 5. The question addressed in this section is whether or not the perceived differences between the state-of-the-art and New York community college current practice should be reduced or eliminated altogether. A number of alternative resolutions of this question are outlined below for policy makers ranging from those relatively easy to accomplish to ones more difficult to achieve in cumulative order. It must be recognized, however, that in spite of the sequence of policy alternatives presented below basic improvement in management controls depends upon conformance of the existing New York community college accounting and financial reporting systems with national standard generally accepted accounting principles (GAAP). Because of the obvious short-term difficulty of establishing such a realistic fact base, a change to GAAP is deferred in this series of alternatives. Furthermore, more effective and state-of-the-art strategic planning and management control in New York's community college system will probably require a reorganization strengthening both centralized statewide policy-making and decentralized local community college management controls. This centralization/decentralization problem is aggravated in New York by existing jurisdictional arrangements and the many constituencies of the individual community colleges. As a result, a proposed resolution of this problem is deferred to the last alternative proposed below.

Alternative No. 1 - Continue without Change Current New York Community College Strategic Planning and Management Control Law & Practice:

The easiest policy alternative is always to maintain the existing system (or non-system!) without change or any effort to bring it to the state-of-the-art regardless of current levels of efficiency and effectiveness. As a result, the first alternative considered is to continue without change New York's current community college strategic planning and management control law and practice. Following this path, however, has the following advantages and disadvantages.

Advantages: The advantage of maintaining the status quo in New York's community college non-system of strategic planning and management control is avoidance of the disruptions and turmoil accompanying any major innovative change. Such change can generate many real or perceived threats to existing organizations and systems.

Disadvantages: As clearly demonstrated in Section 5 above, New York's community college strategic planning and management control procedures are primitive when compared with national state-of-the-art technology. This perceived low-level of New York's community college planning and controls could lead to questions regarding the overall efficiency and effectiveness of this segment of the State's system of higher education. This problem cannot be permanently buried out of sight and is directly addressed in the proposed policy alternatives to follow. The effect of taking no action at this time and of making no attempt to improve practices, even within the existing SUNY and CUNY community college structure, could prove irreversible. Without the clear sense of purpose and direction provided by effective strategic planning, there would be no guidance

or framework by which the needs of New York for an efficient and effective system of community college education could be satisfied adequately. More guess-work, hit-and-miss management techniques, accidental growth & death of programs, and crisis management would be the inevitable result of such negligence. In such a chaotic setting contrary individual goals are easily promoted and State legislative intent circumvented. Where there is no regular and routine anticipation of the future, there is no ability to see things as a whole and in proper perspective. In an era of rising costs this leads not only to an undirected mismanagement of resources but also to the opportunity for possible fraud, waste, abuse and error. A continuing downward trend of New York community college efficiency and effectiveness would be the inevitable result of maintaining the status quo.

Alternative No. 2 - Strengthen Strategic Planning and Improve Management Control Practices in New York's Community Colleges:

The second policy alternative would take the initial steps toward strengthened strategic planning and improved management control in the New York community college system. No legislation or structural changes would be required to carry out these relatively easy to implement improvements in the existing system. These initial steps would be to have:

- (1) SUNY and CUNY together produce a statement of statewide community college system goals and objectives to be used in developing their 4-year State mandated master plans. To develop this statement SUNY and CUNY could, under the auspices of the Regents, jointly hold a conference of top-level community college administrators to determine and

publish these goals and objectives after proper hearings and study. Such a conference would, if necessary, also recommend needed changes in community college law to conform with these new goals and objectives.

- (2) SUNY and CUNY include the statewide goals and objectives developed in (1) above in their master planning process along with a systematic review of external influences likely to affect their community colleges in the future and an analysis of their strengths and weaknesses.
- (3) The individual SUNY and CUNY community colleges develop 4-year state-of-the-art strategic plans within the general guidelines of the SUNY and CUNY community college master plans developed in (1) & (2) above. These institutional strategic plans would be submitted every 4 years to CUNY and CUNY for approval.
- (4) SUNY, CUNY and the State Comptroller amend the existing preliminary operating budget estimate forms and procedures to require of the individual community colleges a state-of-the-art 5-year plan/budget based on the strategic plans developed in (3) above. The NCHEMS activity classification structure could be used in these forms with the greatest amount of detail in the current budget year.
- (5) The individual community colleges conform their accounting systems with the Comptroller's Uniform System of Accounts for Community Colleges subject to compliance audit at least once

every two years by the State Comptroller. Such compliance audit would verify that the community college accounts are so maintained.

- (6) The individual community colleges submit an annual report to SUNY or CUNY on their operations including financial statements and an assessment of conformance with strategic plans and budgets. Such annual reports would be made public.

Advantages: This second alternative would begin the process of treating New York's community colleges as part of a single statewide system with common systemwide goals and objectives. In addition, institutional state-of-the-art strategic planning would be required taking into consideration both state and local needs. This more sophisticated approach to planning at both the central and local levels would begin to set an overall frame of reference and sense of direction for New York community colleges now lacking but found in many other states such as California, Florida, Illinois, Texas and Michigan. Such improved coordination and development of a more balanced centralized/decentralized system is a necessary prelude to increasing the overall efficiency and effectiveness of New York's community college system.

Furthermore, this alternative would start improving management control at the institutional level by moving in the direction of considering each community college as a responsibility center within the entire State system. The requirement that individual college 5-year plan/budgets be prepared is the first step toward a state-of-the-art system of programming and budgeting at the institutional level. The specification and utilization of statewide

uniform community college accounting subject to compliance audit starts the process toward establishing an accurate, timely and reliable community college fiscal information system in New York State. This fiscal fact base is a necessary prerequisite to establishing efficient and effective management control within the system. This is reinforced by requiring publication of individual community college financial statements to ensure accountability and proper stewardship of institutional resources.

Disadvantages: This second alternative by starting a process of greater statewide coordination and standardization could be viewed as threatening the existing local autonomy of New York's community colleges and dampening local initiative and innovation by the more outstanding institutions. Such increased centralization could produce fears of control of local community colleges by a remote State bureaucracy. Furthermore, legitimate State concerns for increased accountability, efficiency and effectiveness of the publicly supported community colleges could also be interpreted as infringing upon local concerns for quality education at the community college level. Mandating compliance with the Comptroller's existing ineffective accounting system could be seen as a makeshift effort concentrating upon uniformity rather than on proper accounting procedures. The auditing of such would not be seen as an effort to flag weaknesses in a timely fashion but as more aggravation.

Alternative No. 3 - Strengthen Management Control Accounting and Financial Reporting in New York's Community College System:

The third policy alternative would strengthen New York community college management control by improving institutional systems of

accounting, financial reporting and independent audit by having:

- (1) The State Comptroller revise his Uniform System of Accounts for Community Colleges to conform with national standard generally accepted accounting principles (GAAP) (either those of NACUBO for higher education or of the National Council of Governmental Accounting (NCGA) for state and local governments). In addition, a community college accounting manual similar to Michigan's Manual for Uniform Financial Reporting incorporating GAAP should be prepared for institutional and audit use.
- (2) An annual independent CPA financial and compliance audit of community college financial statements in conformance with generally accepted auditing standards. The CPA audit certificate would be included in the college annual report along with its financial statements.

Advantages: The major advantage of this alternative is that it would prescribe an accurate, comparable and verifiable financial fact base for the college's entire management control system. It would pave the way for financial reform at all levels of New York's community college system and for the correction of existing weaknesses in programming and budgeting. Program costing would then be relatively easy to accomplish. Publication of the college's audited financial statements would ensure reasonably accurate financial reports conforming with operational realities. More valid institutional comparisons could then be made.

Disadvantages: The major disadvantage of this proposal is that

it would not be easy to accomplish on a systemwide basis given the many accounting system variations now in use by New York's community colleges. Few of the current college business officers are now accountants which would mean that an extensive learning process would be required. The costs and disruptions caused by the necessary changes would be great.

AlternativeNo.4-Strengthen Management Control Programming, Budgeting and Performance Analysis and Establish Central Fiscal Information Bases:

The fourth policy alternative builds on the institutional financial fact base prescribed in AlternativeNo.3 above by having:

- (1) Each community college establish a state-of-the-art programming and budgeting system on both a GAAP and cash basis linked to its strategic planning system as prescribed in AlternativeNo.2 above. This GAAP basis programming and budgeting system would be used in monitoring operations and performance analysis, while the cash basis one would facilitate planning and control of the college's cash flow. To assure statewide standardization of this process SUNY, CUNY and the State Comptroller should amend the 5-year plan/budget formats and procedure prescribed in AlternativeNo. above to conform. The recently issued NACUBO publication entitled A Planning Manual for Colleges suggests such standardized formats. (38) These institutional program plan/budgets would be compiled at the State and regional level into systemwide 5-year SUNY/CUNY community college plan/budgets.

(2) Each community college establish a state-of-the-art

performance analysis system comparing budgeted and actual operations using the results of the GAAP basis accounting and budgeting systems. Such analyses should be used to continually improve the efficiency and effectiveness of college operations and sent to SUNY/CUNY.

(3) SUNY and CUNY establish a central community college

computerized fiscal information system consolidating strategic planning and management control reports received from the institutions under their jurisdiction. Such information would be used for central monitoring of the finances and operations of the individual colleges and provide the basis for an eventual centralized/decentralized statewide state-of-the-art community college strategic planning and management control system.

Advantages: The principal advantage of this alternative is that it provides the basis for centralized/decentralized strategic planning and management control of New York's community college system aimed at improving the efficiency and effectiveness of both the total system and all of its component institutions. The accurate and comparable data bases developed at each of the institutions and in the central information system would increase responsiveness to the decision-making needs of both the individual institutions and the community college system as a whole. It would replace the current approach of haphazardly developing fiscal and other information of relatively little value in operating efficiently

and effectively a system as complex and costly as New York's community colleges.

Other advantages of this fourth policy alternative derive from using classifications in the 5-year plan/budget identical to those in the accounting and financial reporting systems. Analyses of variances between planned and actual performance can then be made and corrective action instituted on an exception basis. Educational programs and activities complying with the goals and objectives of the strategic plan would be included in the 5-year plan/budget which would converge in detail to the budget year thereby achieving a needed linkage between the strategic planning and management control processes. Program costing on a realistic basis could be developed as part of the accounting and reporting system using either NCHEMS Information Exchange Procedures or SUNY's CASA as revised for community colleges, but with an agreed-upon method of allocating costs. In addition, new measures and standards of effectiveness and efficiency could be devised so that the institution as a responsibility center could be evaluated with the "bottom line" being an assessment of the overall accomplishments of the system and its institutions leading to corrective goals and objectives. As the strategic planners say "the loop would then be closed". Today's climate of public concern for accountability and the proper use of tax-supplied resources would favor the stewardship approach of this alternative.

Disadvantages: The major disadvantage of this alternative is the cost in time and effort required to achieve it. It would also possibly be viewed as a threat to local autonomy and current customary procedures. Its impact could be seen as a negative one that would

put the business officers in control of the educational process.

AlternativeNo.5-Strengthen Local and Statewide Strategic Planning and Management Control of New York's Community Colleges with a State-of-the-Art Balanced Centralized/Decentralized Organization:

The fifth and last policy alternative proposes a reorganization of New York's community college system into a clearly defined state-of-the-art balanced centralized/decentralized structure strengthening both statewide and institutional strategic planning and management control by:

- (1) Centralizing coordination of statewide strategic planning and management control of New York's community colleges (including maintenance of the fiscal information system proposed in AlternativeNo.4) in one of the following bodies:
 - (a) The New York State Board of Regents; or
 - (b) A coordinating council consisting of representatives from the Board of Regents, SUNY and CUNY; or
 - (c) SUNY; or
 - (d) A state community college board of governors similar to those in California and Illinois.
- (2) Creating autonomous local community college districts in counties or regions presided over by boards of trustees with full control over all college property and operations in the district similar to those in California, Illinois, Texas, Florida and Michigan.

Advantages: This policy alternative would unequivocally place responsibility, authority and accountability for New York's community college system and individual institutions in one organization

at both the statewide and local levels. It would eliminate the existing dilution of responsibility, authority and accountability at the state level between the Regents, SUNY and CUNY and at the local level between the college and its sponsoring organization. Such a resolution of jurisdictional problems in New York's community college system would not only establish clearer lines of authority over strategic planning and management control but would also pave the way for a better understanding of the Wessell Commission proposals for other segments of New York's system of higher education. Furthermore, these proposed local community college districts might also assume jurisdiction over 2-year regional technical colleges thus consolidating under single direction all New York public 2-year institutions of higher education. Another advantage is that a uniform community college fiscal year could also be established consistent with the State's. Furthermore, with the increased efficiency and effectiveness of such a system consideration could finally be given to reduction or elimination of community college tuition which has been the strength of the California system. Lastly it should be noted that this proposed centralized/decentralized community college organization has emerged in most other large states including California, Illinois, Texas, Florida and Michigan.

Disadvantages: The major disadvantage of this alternative is again that associated with change. The cost, effort and disruption of existing organizational arrangements would be considerable. New York would no longer have a peculiarly unique system of community colleges. Such a drastic change as that proposed here would fly in the face of higher education history in New York where

the community colleges were tied into the development of a public university system rather than being an extension of the public schools as in most of the states cited above. As a result New York's local governments might feel aggrieved at losing the community colleges they have so carefully nurtured in the past. Clearly then, a great deal more consideration of this alternative and further research on the matter would be needed before such drastic steps were taken, even in the name of educational efficiency and effectiveness.

There is no doubt that some combination of the policy alternatives set forth above would contribute materially to a more efficient and effective system of community colleges in New York State.

7. CONCLUSIONS AND RECOMMENDATIONS:

7.1 Conclusions:

It is now possible to respond to the central issue of this paper, which is whether planning and control in New York's community college "system" and component institutions can be made more fully effective and efficient through the application of business-derived concepts and practices of strategic planning and management control. The response is an unequivocal "YES"!

As a matter of fact there has already been some spillover of business-derived strategic planning and management control concepts and practices into higher education. This spillover is also taking place, but to a lesser degree, into some more progressive community college systems such as those in California, Florida, Illinois and Michigan. Little such spillover has taken place yet into New York's community colleges as has been demonstrated in Sections 4 & 5 above. It might be better therefore for New York's community colleges to adopt a complete state-of-the-art system of strategic planning and management control by conscious technology transfer instead of passively waiting for such spillover to occur.

There will be a natural resistance by many higher education professionals to the expansion and strengthening of strategic planning and management control technology in their territory. The very nature of this business-derived technology is likely to be viewed by such professionals as non-academic and the special province of only the college business officer. System and institutional planning and control is an area little understood by the average college faculty and general administration. On the other hand an understanding of how

strategic planning and management control work to meet the realities of governmental and higher education fiscal crises could start to overcome this academic inertia. New York is now in such a fiscal crisis and the best available tools must be utilized to assure that its community colleges survive and operate efficiently and effectively at minimum possible cost in this environment. (120)

New York community colleges now find it very difficult to deliver a high quality education efficiently and effectively due to their unique organizational structure, history and diverse constituencies. Yet in spite of this and the fiscal problems of New York State and local governments, an attempt to increase community college efficiency and effectiveness must be undertaken. Furthermore, a structural reorganization of New York's community college system is not an initial essential ingredient of such improvement but may become so eventually if a maximum level of productivity is to be attained. The following recommendations are designed with these considerations in mind.

7.2 Recommendations:

Recommendation No. 1:

It is recommended that the status quo Alternative No. 1 in Section 6 above be rejected as being of no help in increasing the efficiency and effectiveness of New York's community college systems and institutions in an era of rising costs and scarce resources.

Recommendation No. 2:

It is recommended that not all of the alternatives specified in Section 6 above be implemented in sequence at this time. Alternative No. 5 dealing with structural reorganization of New York's

community college system is too drastic a proposal and is probably not now politically feasible because of existing strong vested interests in the organizational status quo. Yet in spite of this deference to history, the existing planning and control weaknesses in New York's system of community colleges, particularly in the area of management control, must be drastically improved in the very near future.

Recommendation No. 3:

It is therefore recommended that immediate consideration be given to improving strategic planning and management control in New York's community college systems and institutions as specified in Alternatives Nos. 2-4 in Section 6 above subject to a prior analysis of the detailed implementation problems likely to occur in undertaking such a sweeping series of systems changes.

Recommendation No. 4:

It is therefore recommended that before any action is taken on the above Recommendation No. 3 that a series of implementation papers be prepared dealing with the feasibility of and system design for carrying out the above Alternatives Nos. 2-4. Because of the unique and somewhat irrational existing organization of New York's community college system, such implementation papers are a necessary prerequisite to reform of its planning and control function. The proposed implementation papers are listed below by the policy alternative numbers and steps listed in Section 6 above:

Alternative No. 2 Proposed Implementation Papers:

- (1) A background paper dealing with statewide community college goals and objectives for the use of the

proposed goal-setting conference of SUNY and CUNY top-level community college administrators. This paper should deal with the history and legal mission of the community colleges in New York State noting the differences between the statutory goals of SUNY's and CUNY's community colleges. Goals, if any, for community and student services should be examined along with related amendments to the Education Law.

- (2) An implementation paper specifying the feasibility of and suggested state-of-the-art procedures to be employed by SUNY and CUNY in making a systematic review of external influences and internal strengths and weaknesses likely to affect their community colleges in the future. Such a paper should set forth the rationale for state-of-the-art strategic planning adapted to the circumstances of SUNY's and CUNY's community colleges and the procedural details involved. Changes in the State's master planning law should be proposed along with supporting changes in the Code of Standards and Procedures for Community Colleges.
- (3) An implementation paper specifying the feasibility of and procedures needed to develop four year state-of-the-art strategic plans by local community colleges within the guidelines of SUNY and CUNY community college master plans. This paper should also examine the need for minimum strategic planning standards, suggest who

should approve the local college plans when completed and indicate the frequency of such planning activity.

- (4) An implementation paper setting forth the rationale for amending the existing preliminary budget estimate forms and the procedures necessary to change them into 5-year plan/budgets. Proposed changes in Code and Community College Business Office's Manual should also be specified in this paper.
- (5) An implementation paper on the feasibility of and the procedures to be followed in requiring individual community colleges to conform with existing regulation that their accounting systems conform with the Comptroller's Uniform Chart of Accounts for Community Colleges. The nature and frequency of compliance audits needed to verify such conformance should be specified in this paper.
- (6) An implementation paper on the feasibility of, need for and contents of local community college written annual reports to SUNY, CUNY and the public on the operations of the college. This paper should examine the costs involved in such reporting, the format to be used, the audited financial reports to be included, the other topics to be covered and the methods used to assess the level of achievement in meeting planned strategic goals. The paper should also outline the changes needed in the Code to conform.

Alternative No. 3 Proposed Implementation Papers:

- (1) An implementation paper on the feasibility of and procedures and standards to be followed in revising the Comptroller's Uniform System of Accounts for Community Colleges to conform with national standard generally accepted accounting principles (GAAP). This study should consider whether New York's community colleges should conform with higher education GAAP as specified by the National Association of College and University Business Officers or state and local government GAAP as now specified by the National Council on Government Accounting in the light of the recent intrusion of the Financial Accounting Standards Board into this standard-setting area. In view of the inadequacies of the Comptroller's existing modified cash basis accounting system the paper should propose a new statewide community college accounting system to be adopted by the Comptroller specifying how it is to be implemented and manualized. It should also consider the financial and management reports to be produced by the revised system and their independent audit.
- (2) An implementation paper on the feasibility of and procedures needed to establish annual independent CPA financial and compliance audits of community colleges in conformance with generally accepted auditing standards.

Alternative No. 4 Proposed Implementation Papers:

- (1) An implementation paper on the feasibility of and the procedures for the development of individual community college state-of-the-art programming and budgeting systems on both a cash and GAAP basis linked to their strategic plan. The study should include the costs involved in implementing this proposal, procedures and sample formats.
- (2) An implementation paper on the feasibility of and the procedures for individual community colleges to establish a state-of-the-art performance analysis system comparing budgeted and actual operations using the results of the GAAP-based accounting and budgeting systems.
- (3) An implementation paper on the feasibility of and procedures for SUNY and CUNY to establish a central community college computerized fiscal information system consolidating strategic planning and management control reports received from their colleges. This plan should include an estimate of the costs involved and a proposed system conceptual design.

Recommendation No. 5:

It is recommended that if the implementation papers in Recommendation No. 4 indicate the feasibility of migrating the New York community college planning and control system to Alternative No. 4 that this be done prior to any consideration of Alternative No. 5 dealing with structural reorganization of the system.

Recommendation No. 6:

It is recommended that after Recommendations Nos. 1-5 have been accomplished as far as possible that a new issue paper be developed considering the question of a structural reorganization of New York's now split system of community colleges. This new paper should examine the advantages and disadvantages of New York's unique community college system in light of developments in the other states and propose alternative steps in its possible reform.

APPENDIX I

GLOSSARY OF TECHNICAL TERMS

BALANCE SHEET: A financial statement showing the financial position of an organization at a specified moment in time. It is sometimes labeled a statement of financial position. Assets acquired by the organization are listed on the left in monetary terms. The uses made of these assets are listed on the right as items owed to creditors (liabilities) or owned (equity).

BUDGET: A short-term plan and control device expressed in monetary terms covering a specified period of time, usually one year.

BUDGETING: The management control subprocess of deciding on the actual operating plan for the coming year with that year's program converted into terms corresponding with the spheres of responsibility of those charged with executing the budget. The budgeting process requires careful estimates of costs and revenues and the budget must be constructed within a ceiling representing estimated available resources. Since the budget will be used during the year as a plan against which actual performance will be checked, it is essential that the budget be related to individual responsibility centers and thus provide a basis for control of center managers.

EFFECTIVENESS: The degree to which an organization achieves its goals and objectives.

EFFICIENCY: The degree to which an organization's outputs relate to its resources used or inputs. Efficiency increases with the ratio of outputs to inputs.

FINANCIAL ACCOUNTING & REPORTING: The art of recording, classifying and summarizing in a significant manner and in monetary terms transactions and events that are only partly financial in character, so that both managers and parties external to the organization can know how well the organization is achieving its established goals.

FINANCIAL REPORTS: The end product of the accounting process. Under generally accepted accounting principles (GAAP) three primary reports are required: The balance sheet, the income statement; and a statement of changes in financial position as defined in this Glossary. Such financial statements are used by both internal management and external parties. The requirements of external reporting under GAAP determine the basic elements of the internal accounting system.

GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP): A generally accepted set of principles providing the basis for accounting and financial reporting. Such principles are currently established by the Financial Accounting Standards Board (FASB) for all business organizations. Objectives for accounting and financial reporting by non-business organizations except governments have also been established by FASB. Certified public accountants (CPA's) call to public attention the use of any different principles found when auditing financial reports. The general acceptance of GAAP depends on the relevance, objectivity and feasibility of the principles.

GOAL: A statement of the intended output of an organization in broad terms providing general guidance for over-all strategy and programs. As such, an organization's goal should be stated in the following form: "To achieve . .(a result), for. .(a target needing such)".

INCOME STATEMENT: A financial statement summarizing the results of operations for a period of time. It is therefore a flow report. It shows increases in resources (revenues) and decreases by the use of resources (expenses) to arrive at what in business is called net income. In higher education purchases rather than uses of resources are reported as expenditures.

MANAGEMENT ACCOUNTING & REPORTING: Accounting intended for internal planning, coordinating and control purposes with reports designed to communicate, motivate and appraise management. It supplements an accounting and financial reporting system set up and maintained in conformance with generally accepted accounting principles (GAAP) by collecting and reporting additional information for internal full-cost, differential and responsibility measurement purposes.

MANAGEMENT CONTROL: The planning and control subprocess by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives. This process is circular in nature and encompasses all operations in an organization and contains the following four subprocesses: (1) Programming; (2) Budgeting; (3) Operating & accounting; and (4) Reporting & analysis, as defined in this Glossary. The management control function operates within the general policy guidelines established by the strategic planning process as defined in this Glossary.

MANAGEMENT INFORMATION SYSTEM (MIS): Provides managers with information for use in the strategic planning and management control functions. An important component of an effective MIS is an accounting system conforming with generally accepted accounting principles (GAAP). MIS does not solve management problems but provides information to managers for use in effective decision-making. Most management information systems are now computerized.

OBJECTIVE: Is a statement suggesting an appropriate program of an organization in measurable terms, if feasible, of a specific result to be achieved by a course of action to be taken within a specified time. As such it should be stated if possible in the following form: "To achieve . . (a measurable result), for . . (a measurable target needing such), by . . (a measurable process), within . . (a measurable time)".

OPERATIONAL CONTROL: The planning and control subprocess of assuring that specific tasks are carried out effectively and efficiently in response to management control directives. The outputs of an organization are the result of its operational control function.

OPERATING & ACCOUNTING: The management control subprocess occurring during actual operations of an organization in which records are kept of resources actually consumed (inputs) and outputs actually achieved by both program and responsibility center. These accounting records should be adequate for the preparation of both internal managements reports in the following reporting & analysis subprocess and reliable and accurate external financial reports.

PLANNING AND CONTROL SYSTEM: The formal system in an organization of deciding what to do (planning) and assuring that desired results are obtained (control). Such a system facilitates decision-making by managers of an organization. There are similarities in the planning and control systems of business and non-business organizations but the nature of the decisions made may differ. A hard and fast separation between planning and control is not feasible because one of its subprocesses, management control, encompasses part of both functions. The strategic planning subprocess of planning and control is non-cyclical and irregular in occurrence contrasted with the systematic and cyclical nature of the related management and operational control functions as defined in this Glossary.

PROGRAM: A combination of an organization's resources and activities producing outputs designed to achieve goals and objectives. A program may not necessarily correspond with any of an organization's responsibility centers as defined in this Glossary. As a result cross-walking may be necessary in collecting program information including costs.

PROGRAM STRUCTURE: A hierarchical display of an organization's programs grouped in descending order into program category, program sub-category and program element levels conforming with the organization's goal/objective structure in such a way as to facilitate top management decision-making.

PROGRAM BUDGETING: Budgeting by program rather than by responsibility center or object of expenditure. A planning, programming, budgeting system (PPBS) is a sophisticated form of program budgeting, including formal programming and benefit/cost analysis but lacking the underlying discipline of a rigorous accounting system conforming with generally accepted accounting principles (GAAP).

PROGRAMMING: The management control subprocess of deciding on the nature and size of the several programs that are to be undertaken in order to achieve an organization's objectives. Strategic planning merges into management control in the programming process which usually encompasses a number of years in the future and establishes a programmatic framework for the current budgeting cycle.

REPORTING & ANALYSIS: The management control subprocess after the period of operations in which management reports comparing budgeted outputs & inputs with actual outputs & inputs are prepared and analyzed to determine situations requiring corrective action in the next management control cycle.

RESPONSIBILITY CENTER: A group of people in an organization headed by a manager who is responsible for the group's activities.

STANDARD: A principle established by an authoritative body for the measurement of quality and value.

STATE-OF-THE-ART: The best available techniques, methodology, data, experience, with respect to policy planning, efficiency measurement, formative research, evaluation research or program effectiveness evaluation. The practical level to which any branch of professional skill or knowledge has been developed at a particular time.

STATEMENT OF CHANGES IN FINANCIAL POSITION: A financial flow statement sometimes called a cash flow or funds flow statement. It explains the changes that took place in a balance sheet account or group of accounts during the period between the dates of two successive balance sheets.

STRATEGIC PLANNING: The planning and control subprocess of deciding on the objectives of an organization, on changes in these objectives, on the resources used to attain these objectives, and on the policies that are to govern the acquisition, use, and disposition of these resources.

VARIANCE ANALYSIS: The difference between planned performance as specified in a budget and actual performance as reported at the end of the budgeted period.

APPENDIX II
REFERENCE NOTES

1. INTRODUCTION:

(no reference notes)

2. PRESSURES FOR IMPROVED STRATEGIC PLANNING AND MANAGEMENT CONTROL SYSTEMS IN NEW YORK'S COMMUNITY COLLEGES:

- (1) Many writers have expounded on this theme. See: Final Report of the Carnegie Council on Policy Studies in Higher Education, Three Thousand Futures (Jossey-Bass, 1980), Chapter 2; Paul Jedamus, et al., Improving Academic Management (Jossey-Bass, 1980), Chapters 1 & 2; and John D. Millett, Higher Education and the 1980's (Academy for Educational Development, 1978).
- (2) Susan Abramowitz and Stuart Rosenfeld, Declining Enrollments: The Challenge of the Coming Decade - A Summary Report (National Institute of Education, 1978), Page iii. The report states that not all higher education institutions will survive the anticipated decline in students. The institutions best able to survive will be those that are well-managed and whose administrators are willing and able to plan for flexibility in their academic programs and in the the use of their resources. According to Paul Wing and Glenwood L. Rowse there will be an 18% decline in FTE enrollment in New York's colleges by 1990. See: State Education Department, Fiscal Options in Postsecondary Education in New York State - Period of Declining Enrollment, p.24.

(3) Most adult students are part-time students. Furthermore colleges located in isolated areas are limited in their ability to enroll adult students as most city and community colleges are already serving them in large numbers. In addition training adults to meet technological change will in many cases require special programs and costly equipment. On the other hand the State University of New York believes that "much of the decline in high school graduates will be offset by an increase in older adults (25-years plus)". See: Memorandum from Jerome B. Komisar to Presidents, State University of New York (SUNY), Deans, Statutory Colleges, October 30, 1980.

(4) Chapter 113 of the Laws of 1981 (State of New York) makes the cost of contracted business courses at community colleges eligible for basic state aid. A number of SUNY small business centers will be established at community colleges and state-operated campuses in early 1982. (State of New York, A Program Summary, 1981-1982, p. 14).

3. STRATEGIC PLANNING AND MANAGEMENT CONTROL STATE-OF-THE-ART:

3.1 A Conceptual Framework of Strategic Planning and Management Control Processes in Organizations:

- (5) Robert N. Anthony, Planning and Control Systems. A Framework for Analysis (Harvard University, 1965). By permission.
- (6) For details see: Derek F. Abell, Defining the Business: The Starting Point of Strategic Planning (Prentice-Hall, 1980); Kenneth R. Andrews, The Concept of Corporate Strategy (Irwin, 1980)

Egor H. Ansoff, Strategic Management (Wiley, 1979); John R. Argenti Systematic Corporate Planning (Wiley, 1974); _____, Systematic Corporate Planning (Falsted Press, 1977); John W. Bonge and Bruce P. Coleman, Concepts for Corporate Strategy: Readings in Business Policy (MacMillan, 1972); C. Ronald Christensen et al., Business Policy: Texts and Cases (Irwin, 1978); _____, Policy Formulation and Administration (Irwin, 1980); David W. Ewing, The Human Side of Planning (MacMillan, 1969); Frank F. Gilmore, "Formulating Strategy in Smaller Companies", Harvard Business Review (May/June, 1971); Peter Lorange, Corporate Planning, An Executive Viewpoint (Prentice-Hall, 1980); _____ and Richard F. Vancil, Strategic Planning Systems (Prentice-Hall, 1977); Daniel McCarthy et al., Business Policy and Strategy: Concepts and Readings (Irwin, 1979); W.W. Simmons, So You Want to Have a Long Range Plan? (Planning Executives Institute, 1978); George A. Steiner, Strategic Planning: What Every Manager MUST Know (Free Press, 1979); _____, Top Management Planning (MacMillan, 1969); _____, Strategic Managerial Planning (The Planning Executives Institute, 1977); _____ and John B. Miner, Management Policy and Strategy, Text, Readings and Cases (MacMillan, 1977). Page 149 to 152 of the latter has an excellent statement of what formal strategic planning is and is not. Furthermore, writing in Top Management, pages 42-49 Steiner discusses different conceptual models of corporate planning. He includes the Stanford Research Institute (SRI) conceptual model and the Gilmore-Brandenberg model. He states that his own model and Anthony's are very similar and that there are merits in using Anthony's planning and control model.

- (7) Robert N. Anthony, Planning and Control Systems. A Framework for Analysis (Harvard University, 1965), page 16. Reproduced by permission.

(8) Charles H. Granger, "The Hierarchy of Objectives", Harvard Business Review (May/June, 1964).

(9) Anthony, op.cit., Note 7, page 17. Reproduced by permission.

3.2 Strategic Planning and Management Control ~~State-of-the-Art~~ in Profit-making Business Organizations:

(10) All of these strategic planning subprocesses are discussed at length in Mc Carthy and the other authorities cited in Note 6 above.

(11) This definition and the three that follow closely approximate those used by Anthony.

(12) The case studies of the Boise-Cascade Corporation were written by professors at the Stanford Graduate School of Business for classroom discussion. These cases are distributed by the HBS Case Services, Harvard Business School, Boston, Massachusetts 02163.

(13) The schematics were distributed by Stanley Hoch, Manager of Corporate Strategic Planning at the General Electric Company at a conference on strategic planning for governments at the Maxwell School of Syracuse University on May 29, 1981.

See also: Proceedings of the White House Conference on Strategic Planning, 1980, pages 11 to 26; William K. Hall, "SBU's: Hot New Topic in the Management of Diversification", Business Horizons (February, 1978).

(14) For a study of the strategic plans of top management using this deductive approach see: The abstract of a study by Paul Greenwood, James Cook University (Australia) and Howard Thomas, University of

Illinois at Urbana-Champaign, entitled "Strategic Management: The Role of Analytical Approaches and Perspectives" in Proceedings 13th Annual Meeting American Institute for Decision Sciences, Volume 2, November 18-20, 1981, pages 331-334. In the conclusion it is stated that when the results of one study were presented to senior management they "expressed considerable surprise about the depth and quality of information about strategy which could be inferred from external sources". The study also points out that "annual reports reveal a great deal more about corporate strategy than many managers realize!"

(15) See Note 6 above for details.

3.3 Strategic Planning and Management Control State-of-the-Art in Non-Profit-Making and Non-Business Organizations:

(16) New York Times, December 16, 1977. This article draws upon discussions with the senior analyst of the Advisory Commission on Intergovernmental Relations prior to publication of the Commission's report. This article also cites some of the Commission's findings published in its magazine, Intergovernmental Perspective. The Commission published: In Brief. The Federal Role in the Federal System: The Dynamics of Growth (December, 1980). It said: "The federal government's influence . . . has become more pervasive, more intrusive, more unmanageable, more ineffective, most costly, and, above all, more unaccountable. . .", page 1.

(17) Business Week, December 17, 1979.

(18) New York Times, February 22, 1981

(19) Bower and Christenson conclude that business general management skills of necessity constitute the "core characteristics of the emerging public management profession" - in spite of the fact that administrative influence in the public sector is exerted by a diverse group of officials. See: Joseph Bower and Charles J. Christenson, Public Management (Irwin, 1978), page 3. However in the last analysis business has only one goal - that of making a satisfactory profit. This provides a "built-in" harmony of purpose that is lacking in non-business organizations. See also: Municipal Finance Officers Association of the United States and Canada, Governmental Accounting, Auditing and Financial Reporting (1980), pages 1 to 3. The involuntary taxpayer provision of resources, the insulation from the discipline of the competitive market place, the pervasive influence of political processes, the lack of continuity in government leadership and the all-encompassing role of the annual operating budget and appropriation cycle are cited as major differences. The practice of spending to the hilt, prior to the new budget period, is seen as an incentive to inefficiency. Where business enterprises have discretion in obtaining and using resources, governmental organizations are faced with many financially related legal and contractual provisions relating to revenue acquisition, debt, expenditures, and reporting. But Robert N. Anthony and Regina E. Herzlinger, Management Control in Nonprofit Organizations (Irwin, 1980, pages 31 to 60 make a detailed examination of the characteristics of nonprofit organizations including the consequences of the absence of a profit measure. They see many of the differences as

being only technical or behavioral.

- (20) See: Michael H. Moskow, Strategic Planning in Business and Government (Committee on Economic Development, 1978) for a brief review of strategic planning in business and a failure to see transfer possibilities to governmental organizations.
- (21) Lawrence E. Lynn, Jr., Designing Public Policy. A Casebook on the Role of Policy Analysis (Goodyear, 1980). Lynn points out that most public policy decisions are made on the basis of incomplete, hastily compiled and often mistaken formulation of the issues and alternatives. The real test of an analysis is, does it improve the basis for making the decision? A conceptual framework or model helps in understanding the fundamental logic of the problem and provides a frame of reference for selecting policy objectives, identifying alternatives, and analyzing their consequences. A sensitive and sophisticated use of policy analysis is therefore needed.
- (22) Municipal Finance Officers Association, op.cit. in Note 19.
- (23) American Institute of Certified Public Accountants (AICPA), Accounting Principles and Reporting Practices for Certain Non-Profit Organizations (1978).
- (24) See: Malvern J. Gross, Jr., and William Warshauer, Jr., Financial and Accounting Guide for Non-Profit Organizations (Wiley, 1979) for details of key concepts and methods of financial accounting and reporting in non-profit organizations.

- (25) _____, ibid., pages 303 to 312 outline future trends in non-profit accounting. Furthermore, following the exploratory study of conceptual issues by Robert N. Anthony, Financial Accounting in Non-Business Organizations (Financial Accounting Standards Board (FASB), 1978), FASB issued Statement of Financial Accounting Concepts No.4. Objectives of Financial Reporting by Non-Business Organizations (December, 1980). This conceptual framework is expected to lead to consistent standards that prescribe the nature, function and limits of financial accounting and reporting for non-profit organizations. Whether these concepts will apply to government accounting and financial reporting has not yet been determined.
- (26) A thorough discussion of outputs and their measurement will be found in Anthony and Herzlinger, op.cit. in Note 19, chapter 6. A continuum of output indicators from the unmeasurable social indicators at one end to precisely stated process measures at the other, is discussed along with a variety of measures that can be used for different purposes. The difficulties of doing strategic planning in governmental units was discussed by C. Mark Lawton, First Deputy Director of the New York State Division of the Budget at a conference for strategic planning for government units, "Choices for the 1980's", Maxwell School, Syracuse University, May 29, 1981. Lawton said, "But the hurdle of budgetary and legislative endorsement is something that has no counterpart in the private sector and it brings into focus some of the institutional differences that will limit the transference of this technique".

(27) The case of the Kaiser-Permanente Medical Care Program is in Bower and Christenson, op.cit. Note 19, pages 219 to 270.

(28) In fact, Bower and Christenson, ibid., go to great lengths to explain the nature of a "good" goal.

3.4 Strategic Planning and Management Control State-of-the-Art in Higher Education Systems and Institutions:

(29) See: D. Kent Halstead, Statewide Planning in Higher Education (U.S. Government Printing Office, 1974), pages 1 to 35 for the development of statewide planning in higher education. Methods outlined in this book have been widely followed in higher education planning.

(30) See Note 1 above. A 1971 Task Force on Statewide Comprehensive Planning for Post-Secondary Education of the Education Commission of the States report entitled, Comprehensive Planning for Post-Secondary Education said: "Strategic planning provides the framework within which tactical planning is developed and implemented. It is subject to few changes (if any) between major planning cycles and ought to reflect the fundamental assumptions about post-secondary education, the long-range societal objectives and goals, and the principal missions, roles, and functions of all educational institutions and agencies . ." (page 9).

(31) Stanley Young, "Some Dimensions of Strategic Planning for Higher Education", Planning for Higher Education (Summer, 1981).

- (32) Phillip Kotler and Patrick E. Murphy, "Strategic Planning for Higher Education", The Journal of Higher Education (September/October, 1981).
- (33) James R. Hollowood, College and University Strategic Planning. A Methodological Approach (Arthur D. Little, Inc., August, 1979).
- (34) John Merson and Robert L. Qualls, Strategic Planning for Colleges and Universities. A Systems Approach to Planning and Allocation (Trinity University Press, 1979).
- (35) This program classification has been widely reproduced. See for example: Douglas Collier, Higher Education Finance Manual: An Overview (National Center for Higher Education Management Systems (NCHEMS), December, 1972), page 49.
- (36) See: National Association of College and University Business Officers (NACUBO), College and University Business Administration (loose-leaf) 5:6, pages 8 to 10 and also the formats used for the Higher Education General Institutional Survey (HEGIS) Financial and Employee Reports submitted annually by colleges and universities to the National Center for Educational Statistics See also: Program Budgeting Universities (Ohio Board of Regents, 1973), page 26. The latter also provides excellent information on a method of developing degree program costs.
- (37) Alvin C. Eurich and Sidney G. Tickton, Long Range Planning and Budgeting at Colleges and Universities (Academy for Educational Development, 1973) and Sidney S. Micek, editor, Integrating Academic Planning and Budgeting in a Rapidly Changing

Environment: Process and Technical Issues (NCHEMS, 1980).

This book identifies and summarizes issues addressed at a 1979 forum of top level educational administrators. It emphasizes planning techniques of identifying and choosing between alternatives instead of using traditional forecasting methods that depend on future promises and new action plans for implementation.

(38) NACUBO, A Planning Manual for Colleges (1980)

This manual updates a 1975 version called A College Planning Cycle: People, Resources, Process A Practical Guide which in turn grew out of Sidney G. Tickton's Needed: A Ten Year College Budget (Fund for the Advancement of Education, 1961).

(39) NACUBO, Financial Self-Assessment. A Workbook for Colleges (1980).

Furthermore Peat, Marwick Mitchell & Company, Ratio Analysis in Higher Education. A Guide to Assessing the Institution's Financial Condition (1980) explains the nature of balance sheets and reporting ratios and gives 3-year comparisons for colleges using HEGIS financial survey data. The colleges are listed in a separate volume, Appendix B.

(40) See: NACUBO, College . . Administration, op.cit.in Note 36,

Part 5: Financial Accounting and Reporting and AICPA's Audit of Colleges and Universities (1975). See also: NACUBO, A Management Reporting Manual for Colleges (1980). The accounting section of the latter provides a chart of accounts with a coding structure suitable for computerization. This

manual was developed partly as a result of NACUBO's User Needs: An Empirical Study of College and University Financial Reporting (1975). William M. Wilkinson, Director of Finance at the University of Rochester, prepared an article for NACUBO in September, 1976 entitled, "The Fiction of 'Restricted' Funds in Institutional Accounting". At that time he discussed the irrational and confusing aspects of fund accounting. A year earlier, Price Waterhouse and Company prepared a "Position Paper on College and University Reporting as a Proposal to Restructure and Simplify College and University Financial Statements to Communicate Better to College Trustees". Although the position paper may well have been, in part, an attempt to ward off FASB's proposals it did suggest that assets be depreciated and that notes disclose accounting policies and other details. Furthermore, Price Waterhouse said that reports could easily be restructured to make them more easily understood if consolidated columns and prior year's totals were included.

- (41) The Governmental Accounting Standards Organization Committee proposed an organization for governments similar in structure to FASB because of the "perceived" differences in objectives of financial reporting for governments, the belief that FASB had a business bias and lacked expertise in governmental accounting methods. The draft proposal was released February, 1981 and the final proposal in October, 1981.

- (42) Stephen S. Terry, Chairman of NACUBO's Accounting Principles Committee, testified at a public hearing held by the Government Accounting Standards Organization Committee May 5, 1981 stating:

If two standard-setting bodies define and promulgate accounting principles, there will certainly be conflicts, and similar financial transactions will be reported in two different ways. This is not in the best interest of users of financial statements and would be a step in the wrong direction, . . .

Furthermore, Richard F. Crilly, "Is this the End of Financial Reporting Using Fund Accounting?" in NACUBO Business Officer, January, 1982 answers his own question in the affirmative. He suggests that NACUBO begin immediately to collect copies of college and university financial reports that utilize consolidated reporting methods. (See also Note 52 below and the 1980 Stanford University Consolidated Statement of Sources and Uses of Funds)

- (43) NACUBO states in its College and University Business Administration 4:4 that through the budgeting process ". . . the plans of an institution are translated into an itemized, authorized and systematic plan of operation, expressed in dollars, for a given period . . . they serve as control mechanisms to match anticipated and actual revenues and expenditures." It is this matching or "post-performance review" that is defined as "variance analysis" in this paper.

- (44) Alexander Mood et al., Papers on Efficiency in the Management of Higher Education, A Technical Report Sponsored by the Carnegie Commission on Higher Education (Jossey-Bass, 1972). It examined

the question whether **computerized** models could contribute to **increased** efficiency in higher education. The reluctant conclusion was "not at this time".

- (45) For an account of Exxon's Resource Allocation and Management Program (**RAMP**) at 34 of the 49 colleges assisted see:
J. Victor Baldridge and Michael L. Tierney, New Approaches to Management (Jossey-Bass, 1979).
- (46) Baldridge & Tierney, ibid., give many other reasons for the lack of success including unrealistic expectations and lack of top management support, etc. Also Paul J. Plourde, Experience with Analytical Models in Higher Education Management (NCHEMS, 1976) reports on his study of model users across the nation. His conclusions and proposals for the future are stated on pages 65 to 69 of his report. Other models are **HELP/PLANTRAN** (Higher Education Long-Range Planning/Planning Translator) and **CAMPUS PMS** which is a low-cost operations analysis, resource planning and budget review system answering "what-if" questions. **HEPS** (Higher Education Planning System) combines MIS with budget development and instructional demand. The manual for this **HEPS** system was distributed at a 1978 Academy for Educational Development workshop on "change management". This Academy also has an interactive software community college planning model which projects enrollments, revenues and expenditures and tests strategies to create equilibria between these variables. **EDUCOM's EFPM** (Financial Planning Model) is adapted from Stanford's "TRADES" and asks "what-if" questions using a "host" computer at Cornell University.

EXECUCOM's (Interactive Financial Planning System) was developed in Austin, Texas.

- (47) Paul Jedamus, Marvin W. Peterson and Associates, Improving Academic Management, A Handbook of Planning and Institutional Research (Jossey-Bass, 1980). The authors state: "Most important (and what is thus the central organizing concept of this book), institutional planning and institutional research must be integrated into one interrelated management function rather than being conducted separately", page x.
- (48) Marvin W. Peterson, "Financial Planning for the 1980's: A Response to Reality and Competition", Planning for Higher Education (Summer, 1981), pages 19 to 28. His financial planning concepts and schematic diagram appear to deal with long range planning transferring concepts of strategic planning to the financial area only. It is not clear if programming, as defined in this paper, is included in Peterson's "process perspective", Cause/Effect, January, 1981 contains a planning model as depicted in current higher education literature. This model specifies an assessment of both the internal and external environment before development of a mission statement.
- (49) NCHEMS 1981 strategic planning seminars held across the nation attempted to inform university administrators about strategic planning. The American Management Association also conducted many courses in strategic planning using a "how to do it" approach. Kieft's case studies of academic planning at four colleges (West Virginia University; Western Washington

University; Villa Maria College and Kansas City Metropolitan Community College) provide a picture of current planning practice. Also, Nick Poulton's "Strategies of Large Universities" in Paul Jedamus, et al., Improving Academic . .op.cit.in Note 47, includes case studies of planning at five large universities: University of California at Berkeley (academic master plan; Colorado State University (comprehensive master plan); University of Minnesota (program review); Stanford University (financial planning); and West Virginia University (planning and resource allocation).

- (50) Malcolm Moos, The Post Land-Grant University: The University of Maryland Report (1981), p. viii. By permission.
- (51) Further details of the Stanford University BAP and BEP models can be found in William F. Massey, "Reflections on the Application of Decision Science Model to Higher Education". Decision Sciences (April, 1978), pages 260 to 369; David S. P. Hopkins, "Computer Models Employed in University Administration: The Stanford Experience", Interfaces (Institute of Management Sciences, February, 1979), pages 13 to 23; and Nick L. Poulton, "Strategies of Large Universities" in Paul Jedamus, op.cit. Note 47, pages 634 to 637.
- (52) The University of Rochester has also published consolidated balance sheets. See its Report of the Treasurer 1977 for an example of this practice.
- (53) • See: State University of New York, The Responsive University. The 1980 Master Plan of the State University of New York

(June, 1980) and also A Multi-Phase "Rolling Plan" for the State University of New York (Albany, 1980). The latter is in three parts: "An Overview on Process and Strategy", "Fixed Considerations and Factors", and "The Meshing of Planning and Budgeting through an Annual Evaluation and Report Process".

(54) An excellent overview of the Accounting, Financial Reporting and Budget Accountability Reform Act of 1981 will be found in "Special Issue. Financial Management Reforms", Ways and Means Report (September, 1981).

(55) Not only is the fund structure supporting SUNY's programs revised and expanded in the 1982-83 Executive Budget to comply with the new Act but there are other evidences of continued and improved State support for SUNY that stem directly from the new SUNY budgeting procedures. Significant increases in SUNY's fixed costs are supported by the State because of the compensating modifications made by SUNY in program efficiencies. Vacant positions remaining after the functional programs have been analyzed under the multi-phase rolling plan procedures will not be deleted. The University will be able to re-assign these positions to programs with greater priorities. The SUNY Annual Report 1980-81 gives an excellent account of the first year of the Multi-Phase Rolling Plan.

(56) These conclusions differ from the questions raised in the Society for College and University's News (Summer, 1981) in an article entitled "Strategic Planning: Some Questions to

be Answered". The fact that the environment is not a steady state is recognized by the author of the article who points out that there is a continuing need to monitor the political and social economic climate in strategic planning. However this issue paper is also concerned with efficiency and the need to link strategic planning with management control. Furthermore, the author of the Society's News article recognizes that strategic planning concepts have come into higher education from industry but does not suggest, as does this issue paper, that concepts of management control must be transferred also.

3.5 Strategic Planning and Management Control State-of-the-Art in Community College Systems and Institutions:

(57) In 1971 Charles Ward of the Center for Occupational Education, North Carolina State University at Raleigh identified seven types of statutory provisions for 2-year colleges, as follows:

- as part of a statewide system of higher education, e.g. Georgia.
- under a state college or university, e.g. West Virginia.
- under a separate state board with local boards of trustees, e.g. Illinois.
- under a separate state board with no local control, e.g. Connecticut.
- under a state board of education with local boards of trustees, e.g. Michigan.
- under a state board of education with no local control, e.g. Alabama.
- as part of the public school system, e.g. California, Florida & Maryland all 3 of which now have state boards for community colleges as does Michigan.

At this time California with 70 districts has a 1,189,976 enrollment; Florida with 28 colleges, 200,584 students; Michigan with 29 colleges, 123,000 students; and Illinois with 51 campuses in 39 districts, over 360,000 students.

See: Robert D. DiCarlo, The Goals and Objectives of 1979-1980. Report of the Retreat of Planning Session for Greenfield Community College, July, 1979. (ERIC ed., 196-494; and R.Spencer et al., A Planning Process and the Integration of Institutional Research (Delaware Community College, 1978; ERIC ed., 156-266) and The 1978-1986 Educational Master Plan, Northern Virginia Community College (October, 1978; ERIC ed., 168-672) for examples of planning for comprehensive 2-year colleges in different kinds of community college governance structures.

- (58) Almost 90% of the costs of California community colleges are now paid by the State. Proposition 13 forced the State to use reserves that are now depleted making a new financial structure an absolute necessity.
- (59) See: Searle F. Charles, Balancing State and Local Control, page 33 Charles says that excessive state control is unwarranted but that a supportive and cooperative interaction of state and local agencies is needed. If left entirely to themselves, independently operated public community colleges will not necessarily plan and coordinate jointly developed programs as they should. On the other hand state government interests legitimately control state funds. Such has not necessarily meant complete state control. Florida is given as an example of a reasonably balanced state and local arrangement.
- (60) See Note 82 below.
- (61) See: A Master Plan for Higher Education in California 1960-1975 (Sacramento, 1960).

- (62) See also Exhibit 24.
- (63) Illinois Statutes, Article II, Section 102-12
- (64) (State of Florida) Department of Education, Report for Florida Community Colleges 1979-80 Part 2, "The Community College System in Florida", P. 7.
- (65) Florida Statutes, Volume IIA, Section 240.361.
- (66) See the State composite community college budget in: State of Florida, Recommended Budget for the Fiscal Year 1977-1978 "Department of Education, Division of Community Colleges".
- (67) See: Legislative Budget Estimate for the 1980-81 Biennium submitted to the 66th Texas Legislature by the Legislative Budget Board, January, 1979, page IV-45.
- (68) Op.cit., Note 67.
- (69) See: Illinois State Budget 1982, page 100.
- (70) See: Illinois Community College Board, FY 1983 Operating Budget Request for the Illinois Public Community College System, page 9 and Illinois Statutes, Article VII, Section 107.
- (71) (State of California). California Community Colleges Budget and Accounting Manual, (Revised April, 1978), page 11-1.
- (72) This Manual is presently being revised. GAAP is also referred to in Florida's Community College Management Information System Procedures Manual (August, 1980), page 4.5. Appendix A deals with instructions for the preparation of annual financial reports.

(73) State of Michigan. State Board of Education, Manual for Uniform Financial Reports, Michigan Community Colleges (1981), pages 7-2 to 7-12 and particularly page 7-9.

(74) Michigan Compiled Laws, Chapter 389.143.

(75) Illinois Statutes, Article III, 103-22.2.

(76) State of California. Joint Legislative Audit Committee. Office of the Auditor General, Development and Implementation of Standards and Procedures for Audits of California Local Education Agencies (1980). Reporting the names of incompetent auditors to the California CPA Society was proposed (page C-2).

(77) California . . Long Term Finance Plan, op.cit., page iii.

(78) These Maryland plans differ from the two-volume Design for Excellence - Washington State Community College System Master Plan of the early 1970's that said practically nothing about costs. The annual cost sections provide an interesting comparison of estimated and actual costs per FTE. Such data was not part of the 1973 Master Plan for Community Colleges in Maryland 1973-1983.

(79) John A. Bers, Tying Resources to Results. Integrating the Resource Allocation Process into Planning and Management in a Public Two-Year College (1978. ERIC ed., 164-621).

4. NEW YORK COMMUNITY COLLEGE CURRENT STRATEGIC PLANNING AND
MANAGEMENT CONTROL LAW AND PRACTICE:

4.1 Organization of New York State's Community College System:

(80) The title of New York's unified system of higher education has

historical roots in colonial times. In 1784, the Board of Regents of the University of the State of New York was created but developed into a supervisory group devoid of any instructional activities. In 1895 the Regents became a constitutional body retaining the title, The University of the State of New York.

(81) The status of the New York City community colleges as an integral part of CUNY was clarified in 1979. All of New York's community colleges are locally sponsored with student tuition, state aid and some federal funds making up their total operating income. The Board of Trustees of the City University replaced the interim Board of Higher Education in 1979 following the release of the Report of the Temporary State Commission on the Future of Postsecondary Education in New York State (Wessell Commission) in 1977. Of the 17 members on the CUNY Board, 10 are appointed by the Governor, 5 by the Mayor of the City of New York, one is the non-voting ex-officio Chairperson of the University Student Senate and one is the Chairperson of the University Faculty Senate.

(82) 1202 commissions were established under Section 1202 of the Federal Education Act Amendments of 1972. Under Amendment Section 1203 such state commissions were to plan resources for all postsecondary education and are authorized to receive federal grants in order to expand the scope of studies and planning under Title X of the Amendments dealing with community college establishment and expansion.

(83) New York State Education Law, Section 6306.6.

(84) Ibid., Section 6204.2(a).

(85) A streamlining of higher education in New York State through a realignment of responsibilities in higher education was set forth in 1960 by the Committee on Higher Education (Heald Committee). This was largely accomplished by giving the State University greater power of self-determination and considerable freedom from the existing controls exerted by the State Education Department. The "proper" place of the community colleges in this restructured system received little attention but the existing one-third financing of operating costs by the local sponsor was viewed to be a stumbling block to the expansion of the community colleges by this Committee. Richard H. Hall, writing in Management Science Applications to Academic Administration (Edited by James A. Wilson), calls the SUNY/community college organizational structure "loose coupling". Furthermore, Ivan J. Lach, writing in Improving Decision Making (Edited by Mantha Mehallis), complains of the lack of cooperative effort between local colleges and state agencies. This exists, he says, because many community college administrators do not understand the importance of good statistical data for policy formulation (page 8). Paul Wing, in "Community Colleges and State Agencies: Advancing Impact through Shared Goals and Information" does not state this so bluntly but does plead for better relations between community colleges and state and local agencies because it could drastically affect the success and survival of the institutions. He also recommends that better performance indicators be sought so that

all can know the level of success of community colleges in achieving their goals. His list of impact measurements are surrogate in nature. (pages 14-15).

4.2 New York Community College Strategic Planning:

(86) However, Education Law Section 6304.1a

requires the community colleges electing to become full opportunity colleges to develop a plan establishing a "full opportunity" admission policy, its implementation, the assurances of sponsor support to the level required by SUNY regulations, and the provision of programs of remediation, instruction and counselling for all students to be served by the college. As all of New York's community colleges have now elected to become full opportunity colleges, there is no further planning of this kind required by law. Criteria for approval for these one-time plans are set forth in the Code of Standards and Procedures Section 601.6.

(87) Also as the 1202 Commission designated to receive federal grants for planning, the Regents undertake all "planning necessary for such resources to be better coordinated, improved, expanded, or altered so that all persons within the State who desire, and can benefit from, postsecondary education may have an opportunity to do so". (Education Amendments 1972, Section 1203(a))

(88) Also Education Law Section 355 deals with the administrative powers and duties of the SUNY Board of Trustees relating to planning and operation of community colleges. The Board also

establishes standards and regulations covering all New York community colleges.

(89) Education Law Section 6226.3.

(90) See especially pages 35 to 49 of the Regents' 1980 Plan. Under the goal of "excellence" the Regents list as an objective "for certificate and associate degree programs, that the proportions of occupational graduates placed in related jobs, and of liberal arts students and graduates who transfer to baccalaureate programs, be increased".(page 37). As a step toward the development of the Regents' Statewide Plan for Higher Education 1964, the Regents issued a policy statement on the comprehensive community college. This statement added guidance and counselling to the legally mandated community college functions. (See Journal of Regents Meeting, Feburary 26-27, 1964.)

(91) For example, Dutchess Community College Campus Master Plan 1976 followed an agenda of items set forth by SUNY. Sullivan Community College's Master Plan of 1976 followed the same pattern. See also, Dutchess Community College's Master Plan 1972 for a further example. Many of these plans were not expected to be much more than narrative statements about the topics addressed.

(92) See A Multiphase "Rolling Plan" for the State University of New York (1980) and the mimeographed material sent from Chancellor Wharton to the Presidents of the Community Colleges entitled, "Multiphase Rolling Plan, Enrollment and

Program Update (December 22, 1981).

- (93) Dutchess Community College, Plan of 1981/1982; College Plan 1980-81; and College Plan 1979/80. (all mimeographed) See Exhibit 31 for a flow chart of Dutchess Community College planning system relating planning to the budgeting process.
- (94) Tompkins-Cortland Community College, The Institutional Long-Range Plan, Revised 6/79, Original 6/70. See especially pages 11-15 where a WOTS-up analysis is included but called a "SWOT" analysis.
- (95) Broome Community College Master Plan Academic Year 1980-81 (May, 1980).
- (96) A Council of Higher Education Advisors was proposed by the Heald Committee in 1960 to report annually on the state of higher education in New York and to state "publicly and loudly" what ought to be done. Naturally, the Regents saw themselves as this body. SUNY proposed that the Governor appoint such a "council" on an ad hoc basis. SUNY's suggestion has been followed for the most part, with the Legislature also creating select committees to study problems in higher education from time to time. In 1969 Peat Marwick and Mitchell prepared a report The Future of Public Two-Year Colleges in New York State for the State Education Department, SUNY and the New York State Division of the Budget. It proposed that community college service areas be created, local sponsor aid be fixed, the State's portion be left open-ended, and the local boards be

fully independent. In 1970, Hallenbeck spelled out the above concepts in proposed statutory form and recommended that a uniform system of accounting be prescribed by SUNY with the approval of the State Comptroller with a common fiscal year. In 1972, the State Education Department published New York State's Higher Education System: Progress and Problems but as far as the community colleges were concerned, only noted their dependence on local tax and revenue systems in the face of the differentials existing in the full value of real taxable property and in per-capita income among the counties (page 89). Also in November, 1972 and later revised, a SUNY Task Force on Community Colleges issued A Preliminary Report for discussion as an analysis of problems of financing and administering community colleges. In 1973 the New York State Legislative Commission on Expenditure Review issued a program audit entitled Evaluation of Two Year College Trends and noted that previous studies assumed diminished control of community colleges by local sponsors with presumably greater state funding and more careful supervision and coordination. In 1974 the Report of the Select Committee on Higher Education, a joint legislative committee, refined the TAP (Tuition Assistance Program) proposal but said it was ready to work with SUNY on a reorientation of community college structure and operation (page 13). Also in 1973 a Task Force on Financing Higher Education reported to the Governor in Higher Education in New York State proposing that an overall post-secondary commission be established and noting that local governments in New York State

spent more for higher education than those elsewhere. The State's role in the governance of the community colleges was viewed as preventing their effective planning and coordination (page 8).

- (97) The Temporary State Commission on the Future of Postsecondary Education, The Report of the Temporary State Commission on the Future of Postsecondary Education in New York State (March 31, 1977), page ii.

4.3 New York Community College Management Control:

- (98) This Code complies with Education Law Section 6304.1(b)(iv) and is developed under the powers of the SUNY Trustees set forth in Education Law Section 355.1c. These regulations comply with Education Law Section 6221B.1 regarding financing of CUNY community colleges regardless of reference only to SUNY. Likewise, all of Education Law Article 125 is applicable to the CUNY community colleges. Any new regulation by CUNY on community college state aid must also conform with the rules promulgated by SUNY. Thus in financial matters the Code cited here applies to all SUNY and CUNY community colleges. The Community College Business Officers Association is currently reviewing these rules and regulations.
- (99) Sections 50, 52 and 54 of the Regulations of the Commissioner of Education, last revised as of September 2, 1980, deals with community college academic programming. Site visits are now made to ensure compliance with these regulations prior to

re-registration of academic programs with the State Education Department. Under both state and federal law the degree programs of the college must be listed in the college's catalog with the proper HEGIS code number. These program registration and identification procedures are only the beginning of the programming process as defined in this issue paper.

(100) See the chart of general ledger accounts in the Comptroller's 1981 Uniform System of Accounts for Community Colleges.

(101) See Education Law Section 6304.1-b.

(102) SUNY has instituted a 5-year programmatic review procedure covering all of its colleges. Under this procedure each degree and certificate program is evaluated by the local college with summary reports submitted to SUNY for further review. This procedure is in addition to the visitation procedure of the State Education Department to re-register programs and and 10-year re-accreditation cycle of the Middle States Association of Colleges and Secondary Schools.

(103) Letter from Chancellor Wharton to Community College Presidents, December 22, 1981. This action became necessary partly because the Preliminary Operating Budget Requests as received by SUNY from the community colleges, and which include FTE enrollment forecasts, are considered of dubious accuracy. The institutions find it as difficult to forecast operations 2 or 3 years ahead as to project enrollments for 4-year plans. Furthermore,

they are not convinced of the value of these projections knowing that their forecasted FTE enrollments can be "refined" in the annual budget process. As a result institutional Preliminary Operating Budget Requests are often compiled clerically during the vacation period of most top administrators. This may explain why SUNY's request that such preliminary budgets be signed by the Chairman of the institution's Board of Trustees is often ignored on the grounds that such is not required by law.

- (104) For details see State of New York, Executive Budget for the Fiscal Year April 1, 1982 to March 31, 1983, pages 222 to 225.
- (105) For example, see: State of New York, op cit., pages 238 to 239.

Furthermore, no new programs can be included in community college budgets unless first included in SUNY master plans or their amendments and approved by the Regents. This also applies to new programs and services of CUNY's community colleges, with the CUNY master plan being the first step before the Regents' approval. However SUNY says:

It would appear that the main shortcoming of most budgetary processes is that it is not referenced to any overall University or System-wide strategic or long-term plan. The lack of a comprehensive strategic plan puts the system in the position of responding to short-term changes in the environment (changes in budget, enrollment, etc.) with short-term solutions which may result in long-term problems! (See: A Multiphase . . . op.cit., Note 92, page 6.)

For details of the SUNY budget process before the multiphase "Rolling Plan" came into operation see: William H. Anslow, "The Budget Process in the State University of New York" (October 10, 1978) (mimeographed).

- (106) It should also be noted that recent uncertainty about the state aid formulae for community colleges has increased the difficulty of developing all budget estimates at the campus level. The local budget development process is less centered upon goals than upon items that can be supported in the political arena or need to be diffused into other totals for political reasons. Problems may arise regarding estimates but never from program enrollment estimates unless the size of the college's summer school is in question.
- (107) The local sponsor contributes the amounts needed to fund fully the full opportunity program of admitting all high school graduates of the previous year from its sponsored area to appropriate programs. The local trustees' and sponsor's budget resolutions authorize signature of the budget certification which is sent to SUNY with the college budget. This budget is in program format with the resolutions required by the State Comptroller for state aid requests.
- (108) See Education Law Section 6306.4. Title to real property is held by the sponsor but title to all other fixed assets acquired through operating budgets is in the community college board of trustees. The era of campus facility development is over for almost all community colleges except CUNY's. CUNY is constructing a new campus for the Borough of Manhattan Community College.
- (109) The community college operating accounts, especially in the SUNY required program categories, are in an unrestricted

Educational and General Fund in conformance with fund accounting practice. The Plant Fund is a separate accounting system maintained by the local sponsor. The Scholarship or Student Loan Fund is another campus accounting "system". Federal funds are held in a suspense account for later transfer into college operating accounts. There is currently no program costing in New York community college accounting systems. SUNY attempted unsuccessfully to establish such program costing in the early 1970's using the NCHEMS Information Exchange Procedures. Recently, SUNY attempted to determine instructional costs using its Course and Section Analysis (CASA) program as developed for its 4-year campuses as modified for community college use. This effort also has not been successful. Now SUNY is seeking student data from the community colleges for central development of institutional enrollment reports and eventually unit and program cost data. Some individual community colleges are now developing their own program cost data (e.g. Monroe, Sullivan and Ulster). Dutchess has also developed such program cost data most recently for 1978/79. Dutchess has also twice participated in CASA on a trial basis.

- (110) CUNY's Annual Report (end of year report to the State Comptroller) is compiled by the City Comptroller for the City community colleges as one unit. The local SUNY colleges often adjust their closed-out internal accounts to fit the Comptroller's Uniform System of Accounts for Community Colleges used in the report. These "financial reports" are not certified by an outside independent certified public accountant (CPA).

(111) These CPA-prepared financial reports consist of a fiscal year-end balance sheet and financial flow operating statements. These reports are often based on adjustments of year-end accounting figures necessary because the local college system or personnel cannot generate them in a timely fashion without such CPA assistance. The State Comptroller's Office has indicated no objection to this practice as long as the colleges are willing to pay for such CPA report preparation services. It should be noted that in such a situation the CPA preparing the statements also certifies them! As the law provides only for such periodic audits as the local sponsor directs it is only recently that most community colleges started having CPA audits.

(112) These "official" community college annual reports are desk audited by SUNY to determine general compliance with state aid mandates and to assess the level of state aid liability to be expected in future years. SUNY also tabulates its community college budgets in a similar fashion. When comparisons of budget to actual have been made, the variances have been found to be small. This is a reflection of reclassified accounts, an indication that the budget was amended very late in the college year, or that an exceptionally fine budget development and operating control system existed on the campus! The combined annual report and statistical analysis made by SUNY reports on the SUNY system as a whole and presents revenues, expenditures and fund balances by source and function for each college using categories generally recommended by NACUBO. The second part of this report provides

statistical data along with an analysis of revenues and expenditures by FTE for each college. Both sets of tables provide data from the previous year giving the percentage of change.

- (113) The SUNY master plan progress reports are submitted to the Governor and the Regents. The 1978 progress report gave dates of Trustee approval of various amendments and the dates of subsequent approval by the Regents and Governor.
- (114) These Annual Reports are prepared by the Chancellor for the SUNY Trustees to transmit to the Governor, Legislature and Board of Regents.
- (115) The last such report was the Triannual Report of the Chairman 1976-1979 prepared by the old New York City Board of Higher Education.
- (116) Dutchess Community College prepared a 15-year report of the President in the early 1970's. Annual reports have since appeared for 1978/9, 1979/80 and 1980/81 containing pie charts of financial information and the goals and objectives accomplished by the College in the given year.
- (117) See Note 111 above. Furthermore, some local CPA's were, not surprisingly, confused as to what accounting standards to follow and may have inadvertently certified incorrectly some practices as conforming with generally accepted accounting principles in higher education. The public status of these CPA audit reports under the New York Freedom of Information Law is not clear especially if they are never presented to

the local board of trustees at a formal meeting.

- (118) Furthermore, SUNY has requested the colleges to be certain that similar totals agree on both reports - a request that may not be practical because of the different accounting systems used. A reconciliation of similar balances indicating the differences would be appropriate. New York City is independently audited and so therefore is CUNY and its community colleges.
- (119) Invariably these audits turn up poor management practices in the local colleges. Errors in reporting FTE students result in overpayment of state aid. This overpayment is adjusted in the next year's state aid allotments making it even more necessary for the colleges to "cheat" on FTE counts. However, the negotiation process from the time the issue came to light and the time of the final audit, generally results in considerable accommodation by the State's auditors. Campuses usually "sign off" by agreeing to institute an agreed-upon list of changes in their management practices. Compliance audits of TAP awards are handled by the Comptroller separate from the periodic compliance and management audits. Federal audits of student loan funds are now on an annual basis.
- (120) For an extraordinarily interesting study of the factors leading to the long-term economic and fiscal difficulties in New York State, see the recently published book: Peter D. McClelland and Alan L. Magdovitz, Crisis in the Making: The Political Economy of New York State Since 1945 (Cambridge University Press, 1981).

APPENDIX III

BIBLIOGRAPHY

A. PROFIT-MAKING BUSINESS SECTOR SOURCES:

- Abell, Derek F. Defining the Business: The Starting Point of Strategic Planning. Englewood Cliffs: Prentice-Hall, 1980.
- Ackoff, Russell L. A Concept of Corporate Planning. New York: Wiley, 1970.
- Allen, Louis A. The Management Profession. New York: McGraw-Hill, 1964.
- Andrews, Kenneth R. The Concept of Corporate Strategy. Homewood: Irwin, 1980.
- Ansoff, Igor H. Strategic Management. New York: Wiley, 1979.
- Anthony, Robert N. and John Deardon. Management Control Systems: Text and Cases. Homewood: Irwin, 1976.
- Anthony, Robert N. and James S. Reece. Management Accounting: Text and Cases. Homewood: Irwin, 1975.
- Anthony, Robert N. and Glenn A. Welsch. Fundamentals of Management Accounting. Homewood: Irwin, 1977.
- Anthony, Robert N. Planning and Control Systems - A Framework for Analysis. Boston: Harvard University, 1965.
- Argenti, John. Systematic Corporate Planning. New York: Wiley, 1974.
- Argenti, John. Systematic Corporate Planning. New York: Halsted Press, 1977.
- Argyris, Chris. Organization and Innovation. Homewood: Irwin, 1965.
- Bonge, John W. and Bruce P. Coleman. Concepts for Corporate Strategy. Readings in Business Policy. New York: MacMillan, 1972.
- Boulder, James B. "Computerized Corporate Planning" in Taylor, Bernard and MacMillan, K. (editors). Top Management. London: Longman, 1973.
- Bower, Joseph. "Effective Public Management", Harvard Business Review, March/April, 1977.
- Christensen, C. Ronald et al. Business Policy: Text and Cases. Homewood: Irwin, 1978.

- Christensen, C. Ronald et al. Policy Formulation and Administration. Homewood: Irwin, 1980.
- Daniells, Lorna N. (compiler). Business Intelligence and Strategic Planning. Harvard University: Baker Library, 1979.
- Ewing, David W. The Human Side of Planning. New York: MacMillan, 1969.
- Ewing, David W. (editor). Long Range Planning for Management. New York: Harper and Row, 1972.
- Flamholtz, Eric. "Organizational Control Systems as a Managerial Tool", California Management Review, Winter, 1979.
- Galbraith, Jay R. et al. Strategy Implementation: The Role of Structure and Process. St. Paul: West Publishing Co., 1978.
- Gilmore, Frank F. "Formulating Strategy in Smaller Companies", Harvard Business Review, May/June, 1971.
- Granger, Charles H. "The Hierarchy of Objectives", Harvard Business Review, May/June, 1964.
- Henderson, Bruce D. Henderson on Corporate Strategy. Cambridge: Abt Books, 1977.
- Hobbs, John M. and Donald F. Heany. "Coupling Strategy to Operating Plans", Harvard Business Review, May/June, 1977.
- Hoch, Standley. "Strategic Management in G.E.", Proceedings of White House Conference on Strategic Planning, 1980.
- Jensen, Howard C. "Strategic Planning at Control Data", ibid.
- Katz, Abraham. "Planning in the IBM Corporation", ibid.
- Leavitt, Harold J. Managerial Philosophy: An Introduction to Individual Pairs and Groups in Organizations. Chicago: University of Chicago, 1972.
- Likert, Rensis. The Human Organization: Its Management and Value. New York: McGraw-Hill, 1967.
- Lorange, Peter. Corporate Planning: An Executive Viewpoint. Englewood Cliffs: Prentice-Hall, 1980.
- Lorange, Peter and Richard F. Vancil. Strategic Planning Systems. Englewood Cliffs: Prentice-Hall, 1977.

MacAvoy, Robert E. "Strategic Planning", Financial Executive, June, 1980.

Mason, Richard. "A Dialectical Approach to Strategic Planning" in Taylor, Bernard and MacMillan, K. (editors). Top Management. London: Longman, 1973.

McCarthy, Daniel J. et al. Business Policy and Strategy: Concepts and Readings. Homewood: Irwin, 1979.

Naylor, Thomas H. Strategic Planning Management. Oxford, Ohio: Planning Executives Institute, 1980.

Pyhrr, Peter M.A. Zero-Base Budgeting: A Practical Management Tool for Evaluating Expenses. New York: Wiley, 1973.

Schaffer, Robert H. "Putting Action into Planning", Harvard Business Review, November/December, 1967.

Shirley, Robert C. et al. Strategy and Policy Formation. New York: Wiley, 1981.

Simmons, W.W. So You Want to Have a Long Range Plan. Oxford, Ohio: Planning Executives Institute, 1978.

Steiner, George A. Strategic Managerial Planning. Oxford, Ohio: Planning Executives Institute, 1977.

Steiner, George A. Strategic Planning: What Every Manager MUST Know. New York: Free Press, 1979.

Steiner, George A. Top Management Planning. New York: MacMillan, 1969.

Steiner, George A. and John B. Miner. Management Policy and Strategy: Text, Readings and Cases. New York: MacMillan, 1977.

Tilles, Seymour. "How to Evaluate Corporate Strategy", Harvard Business Review, August/September, 1963.

Tilles Seymour. "Making Strategy Explicit" in Business Strategy (edited by Igor H. Ansoff). Middlesex, England: 1974.

Tilles, Seymour. "Strategy for Allocating Funds", Harvard Business Review, January/February, 1966.

Uyterhoeven, Hugo E.R. et al. Strategy and Organization: Text and Cases in General Management. Homewood: Irwin, 1977.

B. NON-PROFIT-MAKING AND NON-BUSINESS SECTOR SOURCES:

Advisory Commission on Intergovernmental Relations. In Brief. The Federal Role in the Federal System: The Dynamics of Growth, December, 1980.

American Institute of Certified Public Accountants. Audits of State and Local Government Units. New York, 1974.

American Institute of Certified Public Accountants. Proposed Statement of Position on Accounting Principles and Reporting Practices for Non-Profit Organizations not Covered by Existing AICPA Audit Guides (exposure draft), April 1, 1978.

American Institute of Certified Public Accountants. Statement of Position. Accounting and Financial Reporting by Governmental Units. Amendment to AICPA Audit Guide "Audits of State and Local Governmental Units". June 30, 1980.

American Institute of Certified Public Accountants. Tentative Report of the Special Advisory Committee on Internal Accounting Control. September, 1978.

Anthony, Robert N. Financial Accounting in Nonbusiness Organizations: An Exploratory Study of Conceptual Issues. Financial Accounting Standards Board, 1978.

Anthony, Robert N. and Regina E. Herzlinger. Management Control in Nonprofit Organizations. Homewood: Irwin, 1980.

Arthur Andersen & Company. Sound Fiscal Management in the Public Sector, 1976.

Bower, Joseph. "Effective Public Management", Harvard Business Review, March/April, 1977.

Bower, Joseph L and Charles J. Christenson. Public Management: Text and Cases. Homewood: Irwin, 1978.

Ernst & Ernst Letter to Director of Research and Technical Activities, Financial Accounting Standards Board, September 22, 1978.

Ernst & Whinney. "Objectives of Financial Reporting by Nonbusiness Organizations", Financial Reporting Developments, May, 1980.

Financial Accounting Standards Board. An Analysis of Issues Related to Conceptual Framework for Financial Accounting and Reporting. Objectives of Financial Reporting by Nonbusiness Organizations, June 15, 1978.

Financial Accounting Standards Board. Objectives of Financial Reporting by Nonbusiness Organizations. Exposure Draft of Proposed Statement of Financial Accounting Concepts, March 14, 1980.

Financial Accounting Standards Board. Statement of Financial Concepts No. 4. Objectives of Financial Reporting by Nonbusiness Organizations, December, 1980.

Graham, Otis L. Jr. "Industrial Strategy for America's Future: Antecedents and Prospects", A speech at Speaker's Seminar on Capital Formation and Job Creation for New York's Future, Albany, New York, November, 1980.

Graham, Otis L. Jr., "Planning", Center Magazine, January/February, 1977.

Graham, Otis L. Jr., Toward a Planned Society from Roosevelt to Nixon. Oxford, England: Oxford University Press, 1977.

Graham, Otis L. Jr., "Planning the Society", Center Magazine, May/June, 1977.

Gross, Malvin J. Jr., and William Warshauer, Jr. Financial and Accounting Guide for Nonprofit Organizations. New York: Wiley, 1979.

Kirk, Donald, "Opening Remarks of Donald J. Kirk, Chairman of the Financial Accounting Standards Board at the FASB Public Hearing on the Objectives of Financial Reporting by Nonbusiness Organizations", October 12, 1978. (mimeographed)

Lawton, C. Mark. "Remarks of First Deputy Director of the New York State Division of the Budget before the Conference for Strategic Planning for Governmental Units", Syracuse, New York, May 21, 1981.

Lee Robert J. Jr. and Ronald W. Johnson. Public Budgeting Systems. Baltimore: University Park Press, 1977.

Leontief, Wassily. "If Mr. Reagan's Policies Flop then What?" New York Times, February 22, 1981.

Lynn, Laurence E. Jr. Designing Public Policy: A Casebook on the Role of Public Policy Analysis. Santa Monica: Goodyear, 1980.

MacLeod, Roderick K. "Program Budgeting Works in Non-Profit Institutions", Harvard Business Review, September/October, 1971.

Moskow, Michael H. Strategic Planning in Business and Government. New York: Committee for Economic Development, 1978.

Municipal Finance Officers Association. Governmental Accounting Auditing and Financial Reporting. Chicago: 1980.

National Council of Governmental Accounting, "Proposed Statement of Accounting and Financial Reporting Objectives for Governmental Units" (exposure draft), June 1, 1981. (typed)

National Council of Governmental Accounting, "Report of the Governmental Accounting Standards Board Organization Committee" (final report), October 13, 1981.

National Council of Governmental Accounting, Statement 1. Governmental Accounting and Financial Reporting Principles. Chicago: 1979.

National Council of Governmental Accounting. Statement 2. Grant Entitlement and Shared Revenue Accounting and Reporting by State and Local Governments. Chicago: 1979.

Naylor, Thomas H. "The U.S. Needs Strategic Planning", Business Week, December 17, 1979.

"Inadvertance Seen in Federal Growth", New York Times, December 16, 1977

State of Hawaii, The Hawaii State Plan, Act 100, Session Laws of Hawaii 1978, The Hawaii State Planning Act, May 22, 1978.

State of New York. Legislative Commission on Economy and Efficiency in Government. Accounting and Financial Reporting Reform in New York State (exhibits in separate volume), July, 1980.

State of New York. Assembly Ways and Means Committee "Special Issue. Financial Management Reforms", The Ways and Means Report, September, 1981.

Walter, Susan N. (editor). Proceedings of the White House Conference on Strategic Planning. Baltimore: 1980.

State of New York, Accounting, Financial Reporting and Budget Accountability Reform Act of 1981.

C. HIGHER EDUCATION SECTOR SOURCES:

Abramowitz, Susan and Stuart Rosenfeld. Declining Enrollments: The Challenge of the Coming Decade. Summary Report. National Institute of Education, March, 1978.

Academy for Educational Development. A Context for Planning at Chicago State University, June, 1980.

Adams, Carl R. (editor). Appraising Information Needs of Decision Makers. San Francisco: Jossey-Bass, 1977.

American Institute of Certified Public Accountants. Audits of Colleges and Universities, 1975.

Anslow, William H. "The Budget Process in the State University of New York", October 30, 1978. (mimeographed).

Bailey, Stephen K. "Facing the Accountability Crunch", Planning for Higher Education, June, 1973

Baldrige, Victor J. and Terrence E. Deal (editors). Managing Change in Educational Organizations. Berkeley: McCutchan Publishing Co., 1975.

Baldrige, J. Victor and Michael L. Tierney. New Approaches to Management. San Francisco: Jossey-Bass, 1979.

Caiden, Naomi, "Public Budgeting Amidst Uncertainty and Instability", Public Budgeting and Finance, Spring, 1981.

Caruthers, J. Kent and Gary B. Lott. Mission Review. Foundation for Strategic Planning. Boulder: NCHEMS, 1981.

Chaffee, Ellen and Douglas Collier. Strategic Decisionmaking and Organizational Results in Colleges and Universities. Boulder: NCHEMS, June, 1981.

Collier, Douglas J. Higher Education Finance Manual. Boulder: NCHEMS, 1975.

Dickmeyer, Nathan and Hughes K. Scott. Financial Self-Assessment: A Workbook for Colleges. Washington: NACUBO, 1980.

Dozier, John et al. A Planning Manual for Colleges. Washington: NACUBO, 1980.

Education Commission of the States. Comprehensive Planning for Post-Secondary Education. Denver: 1973.

- Eurich, Alvin C. and Sidney G. Tickton. Long Range Planning and Budgeting at Colleges and Universities. Washington: Academy for Educational Development, 1973.
- Farmer, James. Why Planning, Programming, Budgeting Systems for Higher Education?. Boulder: WICHE, 1970
- Gambino, Anthony J. Planning and Control in Higher Education. New York: National Association of Accountants, 1979.
- Glenny, Lyman A. "The Anonymous Leaders of Higher Education", Journal of Higher Education, January, 1972.
- Glenny, Lyman A. and George B. Weathersby. Statewide Planning for Post-Secondary Education, Issues and Design. Boulder: NCHEMS, 1971.
- Grashof, John F. (editor), "Higher Education: Where is it Going and How can it Get There?" Proceedings of Academic Administration Workshop, Conference of American Institute for Decision Sciences, November, 1981.
- Halstead, D. Kent. Statewide Planning in Higher Education. Washington: HEW, Office of Education, 1974.
- Hollowood, James R. College and University Strategic Planning: A Methodological Approach. Cambridge: Arthur D. Little, August, 1979.
- Hopkins, David S.P. et al. Applying Analytical Methods to Planning and Management. San Francisco: Jossey-Bass, 1977.
- Hughes, K. Scott et al. A Management Reporting Manual for Colleges. Washington: NACUBO, 1980.
- Jedamus, Paul, Marvin W. Peterson et al. Improving Academic Management. San Francisco: Jossey-Bass, 1980.
- Kotler, Philip and Patrick E. Murphy. "Strategic Planning for Higher Education", Journal of Higher Education, September/October, 1981.
- Kieft, Raymond N. Academic Planning: Four Institutional Case Studies. Boulder: NCHEMS, 1978.
- Lee, Eugene C. and Frank M. Bowen. Managing Multi-Campus Systems: Effective Administration in an Unsteady State. San Francisco: Jossey-Bass, 1975.
- Lelong, Donald C. & R. Sue Mims. "Management Issues" in Finance, Productivity and Management in Post-Secondary Education, Selected Research Topics. Washington: National Institute of Education, 1978.
- Merson, John and Robert L. Qualls. Strategic Planning for Colleges and Universities. A Systems Approach to Planning and Resource Allocation. San Antonio: Trinity University Press, 1979.

- Micek, Sidney S. (editor) Integrating Academic Planning and Budgeting in a Rapidly Changing Environment: Process and Technical Issues. Boulder: NCHEMS, 1980.
- Miller, Richard I. (editor) Institutional Assessment for Self-Improvement. San Francisco: Jossey-Bass, 1981.
- Millet, John D. Challenges in Statewide Planning for the 1980's. Washington Academy for Educational Development, (no date).
- Millet, John D. Higher Education and the 1980's. Washington: Academy for Educational Development, 1978.
- Millet, John D. Higher Education Planning. A Report of Experiences and a Forecast of Strategies for Change. Washington: Academy for Educational Development, 1978.
- Millet, John D. Management, Governance and Leadership: A Guide for College and University Administrators. New York: American Management Associations, 1980.
- Mood, Alexander et al. Papers on Efficiency and the Management of Higher Education: A Technical Report Sponsored by the Carnegie Commission on Higher Education. Berkeley, 1972.
- Moos, Malcolm (Director). The Post Land-Grant University: The University of Maryland Report. A Long Range Planning Study. University of Maryland, 1981.
- National Association of College and University Business Officers. (NACUBO) College and University Business Administration. Parts I to VI in 2 volumes. Washington: NACUBO (loose-leaf and updated as of September, 1981).
- NACUBO, "Response to Financial Accounting Standards Board Conceptual Framework for Financial Accounting and Reporting. Objectives of Financial Reporting by Nonbusiness Organizations", September, 1978 (mimeographed).
- NACUBO. NACUBO Special Report 77-7, June, 1977.
- Ohio Board of Regents. Planning Universities. Columbus: 1974.
- Ohio Board of Regents. Program Budgeting Universities. Columbus: 1973.
- Parekh, Satish B. Long-Range Planning an Institution-wide Approach to Increasing Academic Vitality. Change Magazine, 1977.
- Peat, Marwick & Mitchell Company. Ratio Analysis in Higher Education. A Guide to Assessing the Institution's Financial Condition, 1980.
- Perkins, James A. "Organization and Functions of the University". Journal of Higher Education, December, 1972.

Peterson, Marvin W. "Financial Planning for the 1980's". Planning for Higher Education, Summer, 1981.

Plourde, Paul J. Experience with Analytical Models in Higher Education Management. Amherst: University of Massachusetts, 1976.

Price Waterhouse & Company. Position Paper on College and University Reporting, 1975.

Riesman, David. On Higher Education: The Academic Enterprise in an Era of Rising Student Consumerism. San Francisco: Jossey-Bass, 1980.

Rourke, Francis E. and Glen E. Brooks. The Managerial Revolution in Higher Education. Baltimore: John Hopkins Press, 1966.

Skousen, Fred K. et al. User Needs: An Empirical Study of College and University Financial Reporting. Washington: NACUBO, 1975.

Society for College and University Planning. "Strategic Planning, Some Questions to be Answered". News, Summer, 1981.

Stanford University. Proposed Operating Budget Guidelines, 1981-82.

Stanford University Board of Trustees. Stanford University Financial Report '80.

(State of California) California State Postsecondary Commission. A Five-Year Plan for Postsecondary Education in California: 1976-81. Sacramento, 1975. (ERIC: Ed 122 689)

(State of Illinois) Illinois State Board of Higher Education. A Master Plan for Postsecondary Education in Illinois. Springfield, 1976. (ERIC: Ed 127 849)

State of New York. Report of the Select Committee on Higher Education, 1974.

(State of New York) State Education Department. Fiscal Options for Postsecondary Education in New York State in a Period of Declining Enrollment. Albany, 1979.

(State of New York) State University of New York. A Multi-Phase "Rolling Plan" for the State University of New York. Albany, 1980.

(State of New York) State University of New York. Committee on Planning and Budgeting. "Proposal for Meshing SUNY Academic and Support Planning with Budgeting", May, 1981. (mimeographed)

(State of New York) State University of New York. The Responsive University. The 1980 Master Plan of the State University of New York. Albany, 1980.

Trivett, David A. Goals for Higher Education: Definitions and Directions. Washington: AAHE, 1973.

University of Rochester. Report of the Treasurer, 1977.

Van Horn, R.L. "Strategic Planning at Carnegie-Mellon University", 1980. (mimeographed)

Wilkinson, William M. "The Fiction of 'Restricted' Funds in Institutional Accounting", In NACUBO, September, 1976.

Wilkinson, William M. "The University Treasurer's Report Can Make Sense without Abandoning Fund Accounting or Stewardship", NACUBO Studies in Management, June, 1973.

Williams, Harry. Planning for Effective Resource Allocation in Universities. Washington: American Council on Education, 1966.

Wilson, James A. (editor) Management Science Applications to Academic Administration. San Francisco: Jossey-Bass, 1981.

Wing, Paul. "A Financial Feasibility Model for Higher Education. Will Higher Education have enough Support in the 1980's?", October, 1980 (typed).

Young Stanley. "Some Dimensions of Strategic Planning for Higher Education". Planning for Higher Education, Summer, 1981.

Zaltman, Gerald et al. Dynamic Educational Change. New York: The Free Press, 1977.

D. COMMUNITY COLLEGE SECTOR SOURCES:

- Bers, John A. Tying Resources to Results: Integrating the Resource Allocation Process into Planning and Management in a Public Two-Year College. (ERIC ed. 164-021), 1979.
- Breneman, David and Susan C. Nelson. Financing Community Colleges, An Economic Perspective. Washington: Brookings Institution, 1981.
- Breneman, David, "Financing Community Colleges. A Summary of the Issues". Washington: Brookings Institution, (no date) (mimeographed).
- Charles, Searle F. (editor). Balancing State and Local Control. San Francisco: Jossey-Bass, 1978.
- Cross, K. Patricia. "Community Colleges on the Plateau", Journal of Higher Education, March/April, 1981.
- Gleazer, Edmund J. Jr. The Community College: Values, Vision and Vitality. Washington: AACJC, 1980.
- Gleazer, Edmund J. Jr. et al. Coordinating State Systems. San Francisco: Jossey-Bass, 1975.
- McCabe, Robert H. "Planning for a University College System", Miami-Dade Community College, (no date):
- Martorana, S.V. et al. Dollars and Directions: Issues and Problems Related to Financial Support and Legal Authorizations of Community Colleges. Washington: AACJC et al., 1978.
- Mehallis, Mantha (editor). Improving Decision Making. San Francisco: Jossey-Bass, 1981.
- Medsker, L.L. and Dale Tillery. Breaking the Access Barriers. New York: McGraw-Hill, 1971.
- Richardson, R.C. Jr. and Larry Leslie. The Impossible Dream? Financing Community College's Evolving Mission. Washington: AACJC et al., 1980.
- State Fair Community College (Sedalia, Missouri). Self-Study Report. December, 1981.
- State of California. California Administrative Code, Title 5 (Education) Part 6 (Board of Governors of California Community Colleges).
- State of California. Education Code.
- State of California. Governor's Budget for 1982-83 and 1974-75.

(State of California), California Community Colleges. Annual Financial and Budget Report (CCAF-311), 1975 and also as revised 1981.

(State of California). California Community Colleges. Budget and Accounting Manual, Revised April, 1978. Sacramento: 1978.

(State of California). California Community Colleges. Board of Governor California Community Colleges Fiscal Data Abstracts, 1980-81, February, 1982.

(State of California). California Community Colleges, Board of Governors. Long-Term Finance Plan: Recommendations for the 1980's. Sacramento: 1979.

(State of California). State of California Legislature. Report of the Office of the Auditor General to the Joint Legislative Audit Committee. Development and Implementation of Standards and Procedures for Audits of California Local Educational Agencies, July, 1980.

State of Florida. Accounting Manual for Florida's Public Community Colleges, 1974.

(State of Florida). Florida Statutes Annotated, Volume 1, Section 1-24; and Volume IIA, Section 236 to 248.

(State of Florida) Recommended Budget for the Fiscal Year, 1977-1978.

(State of Florida). Department of Education, Division of Community Colleges. Community College Managment Information System Procedures Manual, August, 1980.

(State of Florida) Department of Education, Division of Community Colleges. Report for Florida Community Colleges, 1979-80, Part I "Statistical Tables" and Part II "The Community College System in Florida", March, 1981.

(State of Illinois). Illinois Annotated Statutes, Chapter 122 "Schools",

State of Illinois, Illinois State Budget, 1982. "Higher Education", pages 91-101 and Appendix page 338.

(State of Illinois). Illinois Community College Board. FY 1983 Operating Budget Request for the Illinois Public Community College System, December, 1981.

(State of Maryland). Maryland State Board of Community Colleges. State Plan for Community Colleges in Maryland: Fiscal Years 1981-1986. 1980 (ERIC: Ed., 187 375).

(State of Maryland). Maryland State Board of Community Colleges. State Plan for Community Colleges in Maryland: Fiscal Years 1982-1987, May, 1981.

(State of Maryland). Maryland State Board of Community Colleges. Statewide Master Plan for Community Colleges in Maryland 1973-1983, October, 1973

- State of Michigan. Executive Budget, Fiscal Year 1982. "Junior and Community Colleges", pages K26-K40.
- State of Michigan, Michigan Compiled Laws. "Annotated" Volume 2, Constitution of Michigan, Articles 4 to End including amendments through March 27, 1981; and Volume 18, Sections 388.1 to 407.
- (State Of Michigan). State Board of Education. Manual for Uniform Financial Reporting, Michigan Community Colleges, 1981.
- (State of Texas). Legislative Budget Estimates for the 1980-81 Biennium, January, 1979.
- (State of Texas). Texas Codes Annotated. Education Code. Subtitle G (Non-Baccalaureate System), Chapter 130 (Junior College Districts).
- Vaughan, George B. (editor). Questioning the Community College Role. San Francisco: Jossey-Bass, 1981.
- Ward, Charles F., An Analysis of Selected Legal and Operational Differences among Public Two-Year College Systems. Center Technical Paper No. 9, North Carolina State University at Raleigh, 1971.
- Wing, Paul. "Community Colleges and State Agencies: Advancing Impact through Shared Goals and Information". (no date) (mimeographed).
- Zoglin, Mary Lou. "Community College Responsiveness, Myth or Reality?" Journal of Higher Education, July/August, 1981.

E. NEW YORK STATE SOURCES:

Anslow, William. "The Budget Process in the State University of New York", October 30, 1978 (mimeographed).

Broome Community College. Master Plan. Academic Year 1980-81, May, 1980.

Columbia Greene Community College. "Planning Documents for 1980; and Actions plans, 1981".

City of New York. Board of Higher Education of the City of New York. Triennial Report from the Chairman. 1976-1979.

Dutchess Community College. Annual Reports,

Dutchess Community College. Campus Master Plan, 1976

Dutchess Community College. College Plan 1980-81.

Dutchess Community College. Full-Opportunity Plan, 1970-71.

Dutchess Community College. "Financial Statements", August 31, 1976.

Dutchess Community College. "Operating Budget Requests"

Dutchess Community College. Plan for 1981/1982, May 1981.

Hallenbeck, Alfred M. A Proposed 1970 Community College Act, January, 1969.

Peat, Marwick & Mitchell Co. The Future of the Public Two Year Colleges in New York State, September, 1969.

Pellish, Sylvia. Financial Support of Operating Costs for Twenty-nine Community Colleges in New York State: Analysis and Implications; Academic Years 1967-68 through 1972-73. Doctoral Dissertation, SUNY, Albany, 1975.

State of New York. "Code of Standards and Procedures for the Administration and Operation of Community Colleges under the Program of State University of New York". Official Compilation of the Codes Rules and Regulations of the State of New York, Title 8, Subchapter D, Chapter V (State University).

State of New York, Education Law, Sections 237, 351, 354, 6206-6279, 6301-6308 and 6452.

State of New York. Executive Budget for the Fiscal Year April 1, 1982 to March 31, 1983.

State of New York. Journal of Regents Meeting, February 26-27, 1964, pages 63-65.

(State of New York) The Report of the Temporary State Commission on the Future of postsecondary Education in New York State, March 31, 1977.

State of New York. Legislative Commission on Expenditure Review. Evaluation of Two-Year College Trends. April, 1973.

(State of New York) City University of New York. Master Plan. The City University of New York, January, 1981.

(State of New York) New York State Assembly Ways and Means Committee. The Ways and Means Report, September, 1981.

State of New York. Office of State Comptroller, Division of Municipal Affairs. Financial Data for School Districts (issued annually)

State of New York. State Education Department. The Bulletin of the Regents 1982 Progress Report on the 1980 Statewide Plan for the Development of Postsecondary Education. Albany: 1981.

(State of New York). State Education Department. Fiscal Options for Postsecondary Education in New York State in a Period of Declining Enrollment. Albany: 1979

(State of New York). State Education Department. New York State's Higher Education Systems, Progress and Problems, Background Studies for the Development of New Methods of Financing. January, 1972.

(State of New York). State Education Department. The Regents Statewide Plan for the Development of Postsecondary Education 1980. Albany: 1980.

(State of New York) State Education Department. Regulations of the Commissioner of Education, Sections 50.1, 52.1, 52.2, 52.23, 54.1 and 54.2.

(State of New York) State University of New York. Manual for Community College Business Offices, 1976, with various updated sections (mimeographed)

(State of New York). State University of New York. "Multiphase Rolling Plan, Enrollment and Program Update: Memorandum to Presidents of Community Colleges from Clifton R. Wharton, Jr., Chancellor, December 22, 1981.

(State of New York). State University of New York. A Multiphase "Rolling Plan" for the State University of New York. Albany: 1980.

(State of New York). State University of New York. 1978 Progress Report on Implementation of the Master Plan of 1976, June, 1978.